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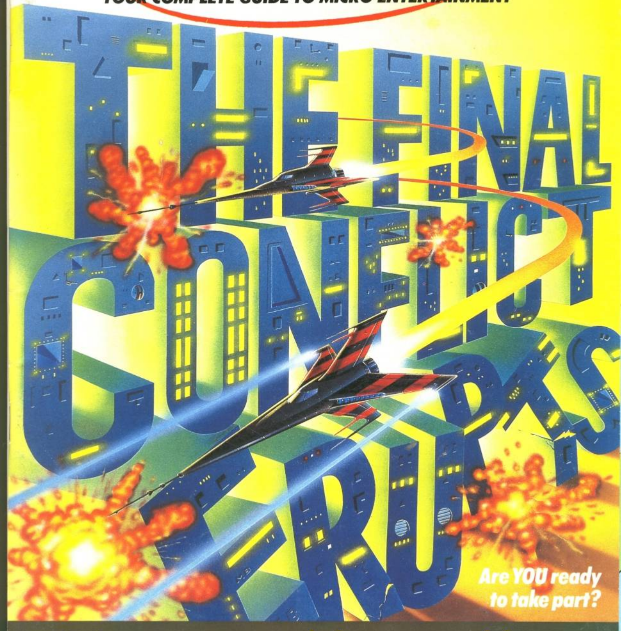
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PERSONAL COMPUTER GAMES JUNE 1984

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To date, Atari's most astonishing game is Pole Position... If you are only going to buy one game, then this is the one you should get.

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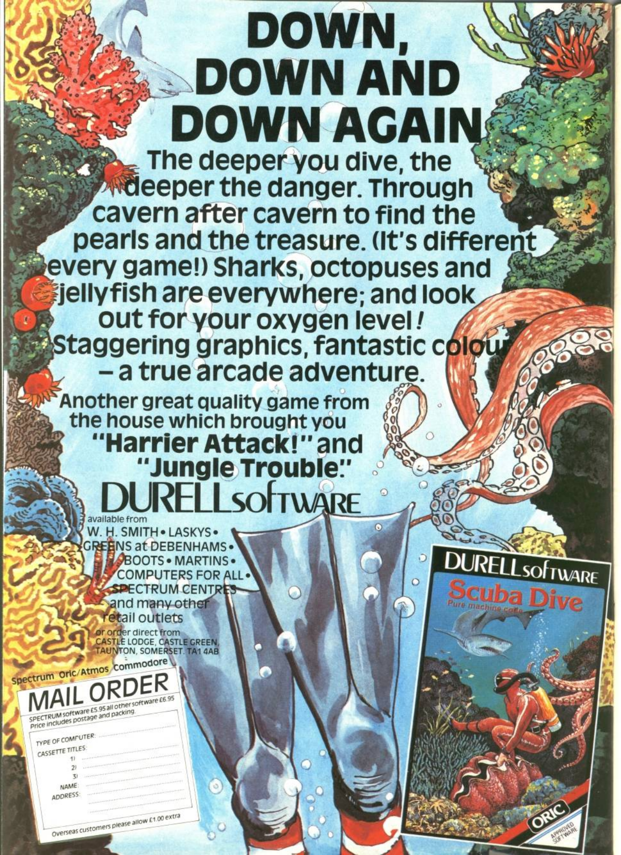

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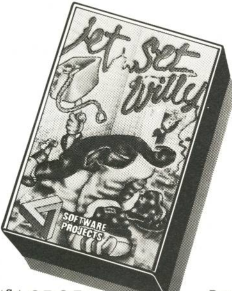
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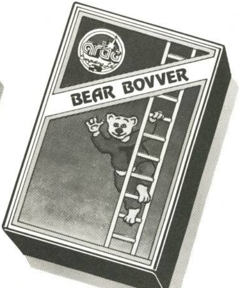
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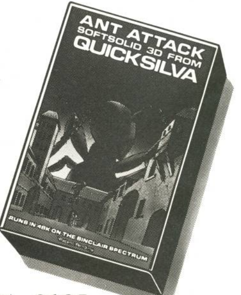
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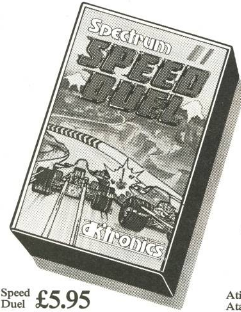
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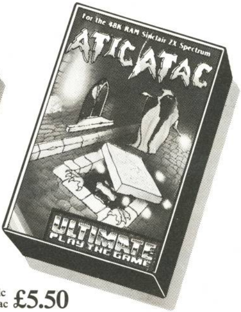
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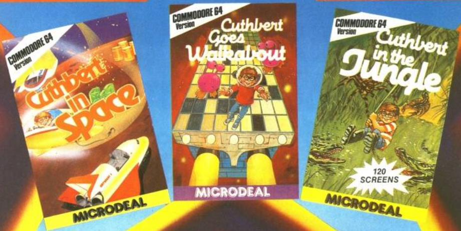
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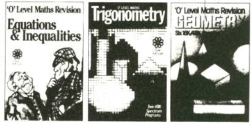

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Dear Readers

As you well know, computer games are just about the world's greatest delight. Why? Because they're continually improving. The pictures, the sound, the challenges get ever more intricate, ever more exciting. Will this continue? you ask.

Some people think it won't. They say that until a new generation of ultra-fast 16 or 32-bit computers with vast memories flood the home micro market, computer games will stay where they are.

Ah, but they've forgotten the ingenuity of programmers. Take the Spectrum. It was launched way back in 1981, but it's only now the machine's potential is being realised with games like Atic Atac *and* Jet Set Willy. *Who knows how much it's capable of?*

As for the other big-selling machine, the Commodore 64, we have no doubt that despite the avalanche of amazing games already available for it, the best is yet to come.

No doubt it won't be long before a new home computer floods the market – astonishingly, there hasn't really been a major success since the 64's release over a year ago. When it comes it'll bring a new generation of games with it.

But owners of existing machines need have no fears. The astonishing ability of today's games programmers will ensure a continuing stream of ever-more brilliant creations to keep you entertained for years to come. And we'll be telling you all about them.

Chris Anderson

WINNING RIDDLES

Oh what fun we've had, sifting through your entries to our March riddle contest. From hundreds of entries we've selected 70 people who've each won two Softek games for their micro. We don't quite have room to print all the winning entries – but maybe you'll think that's a good thing! Now, read on...

What film did the lovesick gorilla go to see?
'Kong with the Wind.'
Lee Andrews, Wembley, Middlesex.

What's President Reagan's Favourite Computer?
Elect-Ron!
R Stewart, Ulster, Edinburgh.

What comedy act partners a home micro with the computer that selects premium bonds?
Oric 'n' Ernie.
Lee Marriott, Bradford, West Yorkshire.

What do you call a thief who pinches Vic 20s and Commodore 64s?
A ComVic.
Tony Pullen, Havant, Hants.

What do you call a fly in an Irishman's Brain?
A Space Invader.
Arthur David, Streatley, Bedfordshire.

What do you call an alien that climbs inside a Scotsman's Ear?
A Space Invader.
Pierce Nagle, Cork, Ireland.

What did Mario say when he was knocked over by a barrel?
AAAAAAARRRRRRRGGGGGHHHH...
Steven Denn, Chorley, Lancs.

What happens when you play with Tolkien's famous computer adventure?
It becomes a Hobbit.
Michael Nicholson, Woodthorpe, York.

Please Miss can I GOSUB the TOLET?
Only if you RETURN.
David Dean, Holmes Chapel, Cheshire.

What would you get if you crossed the 5th round of *Manic Miner* with *Cookie?*
Eugene's Layer Cake.
Michael Wickstone, Bradway, Sheffield.

What did Wally Kong say when he reached the top?
I've Kongquered it!
Steven Chesterman, Broxbourne, Herts.

What is 32, has lots of keys but can't undo any locks?
A Dragon.
Carl Foulser, Chingford, London.

Why did the Irishman send back his Sinclair Microdrive?
Because he thought he was getting a little car.
Michael Davison, S. Bretton, Peterborough.

What do you get 28 days after ordering a new Sinclair QL by mail order?
NOTHING.
D. O'Callaghan, Southampton, Hants.

Why didn't the spiders write a letter to Horace?
Because they dropped him a line instead.
Sergio Ronito, Crystal Palace, London.

What do you get if you cross *Lunar Jetman* with *Atic Atac?*
The Ultimate Lunatic.
Colin Flesher, Bradford, W. Yorkshire.

What is an Irish de-bugging tool?
A fly swatter.
Nathan Rawlinson, Bredons Norton, Glos.

Why does Thor prefer fighting to playing *Valhalla?*
You can lead a Norse to slaughter but you can't make him think.
Graham Laurence, Maidenhead, Berks.

Which policeman prints the best computer programs?
P.C. Gee.
Steven Taylor, Ongar, Essex.

How would Frogger die?
He'd Kermit suicide.

Where does an astronaut drink?
At the 'Spacebar'.
Tim Simmonds, Gwent, S. Wales.

Why did the Micro drive?
Because it missed the Bus.
Ben Clayton, Wainfleet, Lincs.

What did Esmerelda say to Quasimodo?
Your face rings a bell.
Marek Chmiel, Shalimar Gardens, London.

Have you got a computer?
No. I've got a ZX81.
Simon Sykes, Malvern, Worcester.

The other winners are:-

D. Skeates; J. Tomkinson; Mansit Ral; Geoffrey Spinks; J. Coates; Jamie Parker; William Amedume; Edward Flannigan; Daniel Walker; Neil Shipman; Graham Pullen; Paul Brookes; Stephen Collier; David Barton; Diana Theodosiou; Richard Ackrill; Gavin Pearson; Paul Hudson; Tim Utton; Elliot Mair; G.R. Slides; Roderick Muller; Brendan Parker; James Parker; S. Tulley; Paul Berry; Wayne Smith; Simon McConnell; Alistair Mackintosh; T. Adams; Paul Smart; Darryll Taylor; Birbal Chopra; Lee Russell; David Carter; A.R. Tankard; Gregory Gallagher; Adrian Keasey; George Fox; Renato Labi; D. Taverner; Adrian Taylor; Ryan Cunningham; Richard Hutchinson; S. Chapman; Steven Kingstone.

Chris

Stuart

Rod

Ian

Steve

Pete

Sam

AMSTRAD ARRIVES

THE NEW AMSTRAD computer leaps into the shops this month complete with colour monitor, in-built cassette monitor, excellent graphics, stereo sound, and professional keyboard – all for £329. The prospect looks even brighter for games players, with no less than 40 titles available at the time of launch. Many of these are from well-established companies. Durell, Romik, Postern, and Ocean are all planning Amstrad releases for the summer.

Software on show at the launch included Durell's *Harrier Attack* and Romik's *Alien Break-In.* Both graphics and sound were excellent. The Amstrad looks capable of generating some exceptional software for games enthusiasts.

The CPC 464 follows Amstrad's custom, already implemented with great success in the hi-fi market, of using proven technology in a down-to-earth, plug-in-and-power-up format. Despite this the specification of the machine remains impressive.

There are four different models ranging from the basic system with mono monitor at £229 to the top-of-the-range model with disk drive, colour monitor, and Personal CP/M, changing hands at a very competitive £529.00.

Spectrum games for 64

Commodore 64 owners should soon be able to load and run Spectrum software on their machines.

Video Vault International are bringing out the Commodore Emulator for £12.95. Once loaded into your machine, it emulates the Sinclair operating system and allows you to run your favourite Sinclair games.

That means you could soon be playing the likes of *Atic Atac, Fighter Pilot* and *Stonkers* on your 64. 'The system works on 95% of Spectrum games,' claimed Mr Riad Kaffar of Video Vault, but exact details of the program's performance were not available at the time of going to press.

Programmed by an employee of IBM, the Emulator took a year to perfect. It was originally planned for release in April, but was delayed due to development problems. Video Vault are confident that it will be available by the time you read this.

These are not mutant camels, but the real thing. On top are Jeff Minter, author of the hit Commodore 64 game *Revenge of the Mutant Camels*, and Justin Hudd from Fleet, Hampshire. He notched up the top score at the London exhibition when *Revenge* was released, so Jeff invited him on a day-trip to Cairo aboard Concorde. Purpose of the visit? To ride a real camel. 'It was a great day,' enthused Justin.

Pressing for a video record

Derek Creasey hopes to be the first computer games player to enter the Guinness Book of Records. Derek, 14, claims to have set a new world endurance record by playing computer games non-stop for 23 hours and 5 minutes on his BBC.

Games played included MRM's *Castle Assault* and Optima Software's *Omega Probe.*

At one point, Derek was ferried by the organisers, Database Publications, across London in a taxi to the BBC User Show in Westminster. Even then he didn't stop playing, but grabbed a portable video game and hammered away at it in the back of the cab.

Unfortunately a spokesman for the Guinness Book of Records was uncertain whether Derek's claim to fame would make it into print: 'There are a very comprehensive set of ground rules covering endurance records' said Colin Smith from Guiness Superlatives, who publish the book. Once a set of regulations covering the new area of computer games has been agreed upon, then entries may be accepted.

Adam's Arrival

The Coleco Adam from CBS should make its UK debut this month. It will be priced at £625 which includes the computing module and basic Coleco games unit.

The Adam computer will be able to run the new super game-packs, the first of which, *Buck Rogers and the Planet of Zoom*, is included with the purchase of the computer. These games promise to set new standards for the home arcader with over 72K of game code (as against the current maximum of 24K).

PCG's software consultant Tony Takoushi has produced two paperback guides, covering software for the Spectrum and Commodore computers. Each book includes reviews of more than 100 games along with black and white screen shots and ratings. **The Best Software Guides** are published by Pan/PCN at £3.95 each.

A 4MHz Z80 chip runs alongside 32K ROM and 64K RAM, of which 42K is available to the user. There is no hardware sprite facility, but Amstrad say both the Basic and the screen handling have been designed for speed and ease of use. There are outputs for a Centronics printer, joystick, and stereo sound.

A brief preview of the machine revealed a standard Basic with added commands to give easy control of sound and hi-res graphics. There are three display modes, with up to 27 colours and a hi-res screen of 640 x 200 pixels.

The graphics set includes, unusually, musical notes, small human figures, and a couple of cartoon faces in addition to the usual squares and lines. Text is presented in a bold yellow-on-dark-blue format with a particularly attractive typeface.

The colour display is excellent, but if you go for the mono green screen option you can buy a modulator attachment to plug into your colour TV. Alternatively you could later upgrade to colour, using a colour monitor and the RGB output from the computer. Unfortunately you would have to get this from another supplier as Amstrad will not be marketing the system components separately.

Production is now under way and advance orders of 200,000 units have already been placed by retailers. The predicted June output of 5,000 units is planned to be steadily increased to 50,000 units monthly by November. The machine will be available over the counter in Boots, Dixons, Laskys, and Rumbelows, as well as by mail-order.

Valhalla Game of 1983

The highly innovative graphical adventure *Valhalla* has won the PCG Game-of-the-Year award for 1983.

The game, published for the Spectrum by Legend, was selected by a panel of four independent judges from a short-list which included *Manic Miner*, *The Hobbit* and Ultimate's *Pssst!*

The judges were impressed by the way *Valhalla* depicts moving characters actually carrying out the various events which happen during the adventure.

After being presented with the award during a glittering ceremony in London, Legend's John Peel said the game had already sold well over 100,000 copies.

It's the only game Legend has released, and was produced by a team of seven, none of whom had written a computer game before.

'We set out to produce something that could credibly be called a computer movie,' said Peel. 'It's astounding that *Valhalla* has been popular with the mainstream games market.'

The game is now being released on the Commodore 64, and Legend are pressing ahead with a new mega-game about which Peel will say little except: 'It'll be released during 1984.'

The PCG Game-of-the-Year award is one of a series of prestigious awards sponsored by the Sunday Times and our publishers VNU. They're being described as the Oscars of the micro industry.

The home computer of the year award went jointly to the BBC and Spectrum computers.

Imagine games at £30!

Imagine's new releases *Psyclapse* and *Bandersnatch* should be available in July, but at a price of around £30.00.

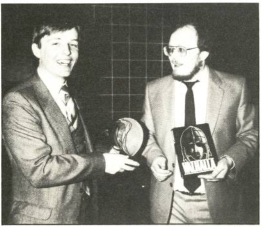
'We're confident that at that price they'll be a bargain,' maintained Imagine's Bruce Everiss. Imagine have just had to abandon plans to reduce their current titles to £3.95 because of 'adverse industry reaction'.

The high price of these new 'mega-games' (as Imagine call them) is apparently justified by their use of new technology. What exactly this entails is not clear at present, but Mr Everiss hinted strongly that the software packages would include some kind of hardware add-on.

'We've gone as far as we can on these machines given their hardware capabilities, and we have come up with a way of increasing the power of the machine ... It is not done through software.'

As for the games: 'You don't have a score, you don't have levels, you've gone completely beyond all that,' declared Bruce, 'You wait and see – you'll be phoning me up when you get them, saying "Brucie was right!"'.

PCG's editor Chris Anderson (left) presents the cut-glass Game-of-the-Year trophy to John Peel.



NEW RELEASES

BARGAIN ZAPS

Software prices take a dive to an astonishing £1.99 with new releases from Mastertronics for the Spectrum, Commodore 64, Dragon, Vic 20, and BBC. Spectrum titles include a version of *Centipede*, *Spectrepede*, and *Tank Trax*, where you try to blast the computer's vehicle into oblivion and stay alive at the same time. A brief look at two Commodore 64 games showed graphics of reasonable quality but simple gameplay.

STARS ON 64

For the first time Melbourne House are launching a game on the 64 before bringing it out on the Spectrum. *Star Trooper*, a relentless shoot-em-up, will cost £6.95. *Penetrator* – a very successful Spectrum version of *Scramble* – also makes its appearance on the 64 at £6.95, as does *Horace Goes Skiing* (at £5.95).

NEW MINTER GAME

Jeff Minter's new blockbuster, *Sheep in Space*, looks like a winner for Commodore 64 owners at £7.50. There's a smooth-scrolling background no less than 51 screens long, which sets the scene for an all-out mega-zap with 30 different attack waves. When your sheep runs out of juice, just zoom down to the pastures for a quick snack.

MANIC MANAGER

Mutant hoovers and giant hamsters have it in for you in Tansoft's *Harridges*, a *Manic Miner*-type game for the Oric/Atmos coming out next month. You take the part of a department store manager who moves from floor to floor emptying cash tills. You could also try swatting flies and chasing ants in *Insect Insanity* or flying helicopter rescue missions in *Rig Runner*. All three programs change hands for £7.95.

WILLY JETS TO NUMBER 1

Jet Set Willy, our May game-of-the-month, has shot straight to number one. The incredible success of its predecessor *Manic Miner*, still at number 4, ensured that thousands of copies were snapped up as fast as Software Projects could supply them.

Quicksilva's *Bugaboo (The Flea)* has hopped up to number five following its release on the Commodore 64. This program has already notched up huge sales on the Spectrum, and it looks even better on the Commodore machine as you hop about the screen avoiding Pterodactyls and scaling cliffs.

Classic Adventure from Melbourne House is a surprise entry at number 38. Not only is this a text-only version of the oldest computer game around, but it's not even a new version at that.

Originally programmed by Abersoft two years ago, it's been given a dramatic new lease of life by Melbourne House, who bought up the distribution rights and reissued it to obvious public satisfaction.

The June charts mark the end of an era, with the disappearance of *Valhalla* from the top 50, for the first time since it was launched. *Valhalla* fans should take heart from the recent release of the program for the Commodore 64, which should push it back into the charts in the near future. Meanwhile *The Hobbit* hangs on by its woolly toes at number 45, still one of the most enjoyable adventures on the market.

Whispering Horace

Price of success

I hear that the follow up to *Valhalla* is going to cost software house Legend £250,000 in development, almost four times as much as they invested in *Valhalla*. Why the huge increase? Have they purchased a Cray computer to write it on perhaps? No. It's just that *Valhalla*'s success has prompted a round of rather large pay rises for Legend staff. Well done, chaps.

Jet Set Wallies

I am outraged at the behaviour of Software Projects over their huge new game *Jet Set Willy*. Having stupidly duplicated thousands of tapes before debugging the program properly, they are now trying to pretend the game's glaring bug doesn't exist! They're putting it about that the fault which develops when you enter the attic is quite deliberate and all part of the game. Well, chaps, you don't fool Horace.

At least they haven't tried to pretend that the bug in their BBC adventure *Legion* is deliberate. Every time you try to go down from a location, the program restarts from the beginning. Software Projects' Chris Cannon would not tell me whether attempts were being made to rectify this. 'I can't stand adventures,' he said.

I can't stand bugs.

PCG SOFT HITS

THIS MONTH	LAST MONTH	•GAME TITLE	•PUBLISHER	SPECTRUM	VIC 20	CBM 64	BBC	ATARI	DRAGON	ORIC	OTHER
1	(–)	JET SET WILLY	SOFTWARE PROJECTS	•							
2	(3)	FIGHTER PILOT	DIGITAL INTEGRATION	•							
3	(1)	CHEQUERED FLAG	PSION	•							
4	(2)	MANIC MINER	S/W PROJECTS/BUG-BYTE	•		•					
5	(41)	BUGABOO THE FLEA	QUICKSILVA	•	•						
6	(7)	HUNCHBACK	OCEAN	•		•				•	
7	(4)	ATIC ATAC	ULTIMATE	•							
8	(12)	CHINESE JUGGLER	OCEAN			•					
9	(6)	3D ANT ATTACK	QUICKSILVA	•							
10	(11)	FLIGHT	PSION	•							
11	(24)	FRED	QUICKSILVA	•							
12	(8)	REVENGE OF THE MUTANT CAMELS	LLAMASOFT			•					
13	(–)	NIGHT GUNNER	DIGITAL INTEGRATION	•							
14	(35)	PINBALL WIZARD	CP SOFT			•					
15	(50)	BLUE THUNDER	RICHARD WILCOX	•							
16	(15)	LUNAR JETMAN	ULTIMATE	•							
17	(19)	WHEELIE	MICROSPHERE	•							
18	(28)	BLAGGER	ALLIGATA			•					
19	(9)	ALCHEMIST	IMAGINE	•							
20	(5)	SCUBA DIVE	MARTECH/DURELL	•		•				•	
21	(36)	FORBIDDEN FOREST	COSMI			•					
22	(33)	TWIN KINGDOM VALLEY	BUG-BYTE	•		•					
23	(–)	SPACE PILOT	ANIROG			•					
24	(40)	SUPER PIPELINE	TASKSET			•					
25	(16)	STONKERS	IMAGINE	•							
26	(37)	BEAR BOVVER	ARTIC	•							
27	(34)	SNOOKER	VISIONS	•	•	•	•			•	
28	(–)	POGO	OCEAN	•							
29	(17)	SKULL	GAMES MACHINE	•							
30	(13)	DEATH CHASE	MICROMEGA	•							
31	(–)	HORACE AND THE SPIDERS	PSION/MELBOURNE	•							
32	(–)	ESKIMO EDDIE	OCEAN	•							
33	(22)	JET PAC	ULTIMATE	•	•						
34	(–)	PILOT 64	ABBEX			•					
35	(30)	POOL	CDS	•							
36	(14)	MR WIMPY	OCEAN	•		•					
37	(18)	SPACE SHUTTLE	MICRODEAL	•							
38	(–)	CLASSIC ADVENTURE	MELBOURNE HOUSE	•							
39	(20)	WIZARD AND PRINCESS	MELBOURNE HOUSE		•						
40	(–)	ODYSSEY	K-TEL			•					
41	(–)	KILLER WATT	ALLIGATA			•					
42	(44)	CHINA MINER	INTERCEPTOR MICROS			•					
43	(32)	FALCON PATROL	VIRGIN			•					
44	(38)	CHUCKIE EGG	A & F SOFTWARE	•		•	•			•	
45	(10)	HOBBIT	MELBOURNE HOUSE	•		•	•				
46	(–)	HUNTER KILLER	PROTEK	•							
47	(46)	FOOTBALL MANAGER	ADDICTIVE	•							
48	(–)	HARRIER ATTACK	MARTECH/DURELL	•	•						
49	(–)	PEDRO	IMAGINE	•							
50	(–)	TRASHMAN	NEW GENERATION	•							

RISING FAST RISING FAST RISING FAST RISING FAST RISING F

1	ZYLOGON	BIG G			•					
2	ANDROID II	VORTEX	•							
3	REBEL STAR RAIDERS	RED SHIFT			•					
4	TRIBBLE TROUBLE	SOFTWARE PROJECTS	•							
5	PLUMB CRAZY	TERMINAL			•					
6	HELL GATE	LLAMASOFT		•	•					
7	THE BOSS	PEAKSOFT			•					
8	FORTRESS	PASE				•				
9	CODE NAME MAT	MICROMEGA	•							
10	SOLO FLIGHT	MICROPROSE			•					

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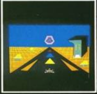
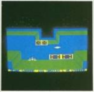


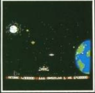
(Screen 1)

DURANIUM BARRIERS



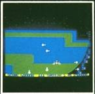
(Screen 4)

APPROACH

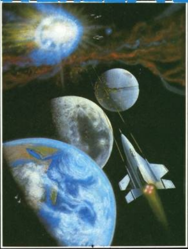


(Screen 2)

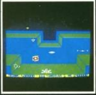
INTERCEPT MISSILES



(Screen 6)

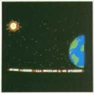


ENTRY



(Screen 3)

VICTORY



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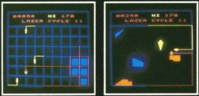

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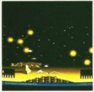

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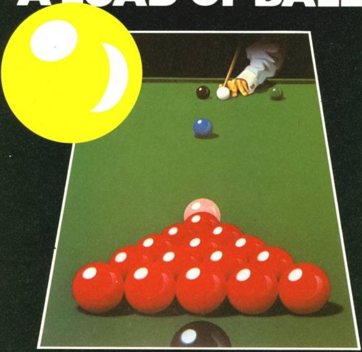

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Scuba Dive disappointment

As a relatively new but avidly enthusiastic owner of the Commodore 64 I feel compelled to express my views to you mainly through frustration but also because I feel I have been somewhat cheated.

I won't pretend I bought my machine to run my business or do my accounts. I bought it purely for its entertainment value. What a wonderful idea I thought on reading your PCG Screen Test reports. At last, no more mistakes through knowing nothing about the game I was purchasing except for its amazingly inviting front cover.

The first game that appealed after your review was *Scuba Dive*, which had quite a hefty write-up. A 'must' you said. 'Wonderfully realistic graphics' you said, 'also available on Commodore 64' you said. What you didn't say was that if you buy it for the Commodore 64 all your comments now mean nothing. It was unrealistic, unimaginative and boring.

Another example was *Megahawk* which, incidentally, looks more like a rather portly seagull. In your own words, 'spectacular', 'impressive', 'superior'. I found it extremely dull and after just a few screens, very boring. I eventually lost my three lives not in my 'mega-excitement' but because I threw myself into the path of a large flying ginger biscuit (?) in a desperate suicide bid. I wonder also how long you test these games for. This game was given a lasting interest score of 8. (Does this mean 8 minutes?)

May I add rather sheepishly that you were right about *Hunchback* and *Twin Kingdom Valley*. I am about to purchase *Forbidden Forest* and *Aztec Challenge*. **Please** be right about these.

Miss P Martins, S Devon

*We **are** right about those, and most of us here stand by Megahawk as a fine 3-D shoot 'em-up. But you're correct in saying that Scuba Dive for the 64 bears no comparison to the Spectrum version. We hadn't seen the 64 game when we made the Spectrum Scuba Dive our Game-of-the-Month, and we certainly don't particularly recommend it.*

Invisible Spirit

Please will you give me any information on Spirit Software, 2 Pembroke Mews, London W8.

On the 1st March I sent a cheque for £8.95. About three weeks after I had not received software, so I sent a letter asking why. I have not had a reply. Are these people rip-off artists, dead slow, or have they gone out of business? Because by hook or by crook I'm going to get my £8.95 back.

C G Tyrrell, Southampton

Several other people have complained about Spirit Software who are no longer advertising with us. We have been unable to contact them.

Buffoons? Not us

I happened to be flicking through your mag and I came across a review on *Dinky Digger* – a game written by two programmers, not one as you assumed. These two people just happen to be my brother and I. Neither him nor I wish to be referred to as 'buffoons'.

You seemed to think the crystal ball is the only way of defence, but if you happened to read the instructions properly you would see – 'A second defence is to run beneath an apple allowing it to fall on a pursuing monster'.

Another point to raise is that you do not 'get the same again only more unplayable'; there happen to be 7 different screens and the action does not speed up until you go through all 7.

Gary Jones, Gloucester

Thanks, Gary, but we still think it's unplayable.

Missing joystick

I am somewhat confused about your review on *Cyberton Mission* in the April edition. You say *Cyberton Mission* does not have the choice of joystick. In my version of the game it does. I'm afraid you've made a mistake or your game is faulty!

D Chamberlain, Hampshire

Bug of eternal life

I have found a bug in Llamasoft's brilliant game *Matrix* for the Vic 20. I believe that it was deliberately left in for Jeff Minter to check that all screens were functioning correctly.

It is possible for one to clear a screen simply by pressing the following keys: RUN/STOP, SHIFT, CTRL and the Commodore symbol key all at the same time. Thus you can have an unlimited supply of lives.

I, however, never use this 'function' as I feel it would detract from my enjoyment of the game and my high score, under normal conditions, is 217,506 reaching level 18.

Mike Davies, Dyfed, Wales

Loud complaint

As I was looking through your assessments on each of the Vic 20 games in your Screen Test section, I noticed that you said Anirog's *Star Defence* has no sound. Was your copy faulty, or should you have turned up the volume? My friend has bought this excellent game – it has the noisiest sound effects for any game I know for the Vic.

Tim Dargie, S Glamorgan

Dragon advice

I am writing to you with a tip for all Dragon 32 owners who have problems saving and loading their own games on tape. If you type POKE 144,3 before you save then the output of the computer is boosted so it is easier to load the game off the tape.

Scott McRae
Aberdeenshire

Unfair to Emax

I would like to comment on your write-up of our joystick the Arcade Professional (April). The price of the joystick is £28.95 and has been since 1st January 1984. The major benefits of the joystick module were overlooked, namely genuine two handed control and gate interchange giving choice of 4 or 8 directional micro switching.

Additionally, it must be explained that the Arcade Professional has been carefully market tested and endorsed by leading software house programmers, details of which can be supplied on request. The style of writing used to describe the Arcade Professional was heavily weighted towards sarcasm leading us to ponder what we did not do to ensure the correct write up.

It would appear that the review was not carried out in a particularly careful manner and based on the final comments concerning left hand, right hand players, would point up that the the reviewer has extremely limited experience when it comes to playing arcade games.

When one wishes to set oneself up as both judge and jury and then nationally broadcast the results, the best one can do is to get one's facts straight.

D A Jervis
Emax Computing

Quite so, Mr Jervis. But you'll be interested to know that everyone here in the office agreed with Peter Connor's criticisms.

Miner disagreement

I was shocked to see in the April edition on the Screen Test section that *Manic Miner* for the Commodore 64 was given such low marks, What's up with Chris Anderson? Doesn't he know when he sees a good game?

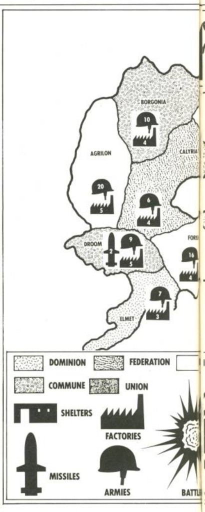
Elliot Weedon
Luton, Beds

The fact is, that if you compare the graphics and sound in Manic Miner with other recent Commodore 64 games they're not particularly impressive.

We gave it a very high rating on lasting interest but were disappointed that Software Projects simply did a straight translation of their classic game without making full use of the 64's potential. No-one could be impressed by a straight translation of a ZX81 game onto the Spectrum.

Time to plan your first moves as the

THE FINAL CONFLICT



This page features one of the most ambitious games ever attempted. It's one which every reader of PCG can take part in. Already hundreds of you have entered the game, and this month you must make your first move.

On the planet Helix, tension has been mounting for months. The four superpowers have been mobilising armies, building missiles, and expanding factories. A final attempt at negotiating peace has failed. All communication between the powers has been terminated. The Final Conflict is about to erupt.

The map shows the situation. As a member of the ruling council of your power, you must study it carefully and plan your move.

The choices before you are complex. You must decide what each country your power controls must do. Should you build more factories to increase your future weapons production? Or is it time for a quick pre-emptive missile attack on another country? Are any of your own countries particularly vulnerable? What are the other powers likely to do?

When you're ready to cast your vote, use the voting form printed on this page. But you can do this only if you have already entered the game, been assigned to one of the powers, and given a code number and full copy of the rules. To enter, post off the entry form and a stamped addressed envelope. It costs you nothing else.

● How the game works

Four superpowers are at war:

The Union of Golathic States
The Rorkian Federation
The Commune of Margrand
The Lorkonist Dominion

Each of the four powers controls a certain number of the planet Helix's 32 countries. Their aim is to capture more countries – any power which can control more than half – ie 17 countries – has won.

Individual players are all allocated to one of the four sides. They must then decide how each of their side's countries should move and vote accordingly. The possible moves are:

BUILD ARMIES
BUILD MISSILES
BUILD SHELTERS
BUILD FACTORIES
SUPPLY
REINFORCE
LAUNCH (missiles)
ATTACK (using armies)

After the votes have been received our computer will tot them up. For each power the move which gets the most votes is acted on.

Once all four powers' moves have been worked out, the computer will use the game's detailed rules to calculate what happens. This will be revealed in our next issue.

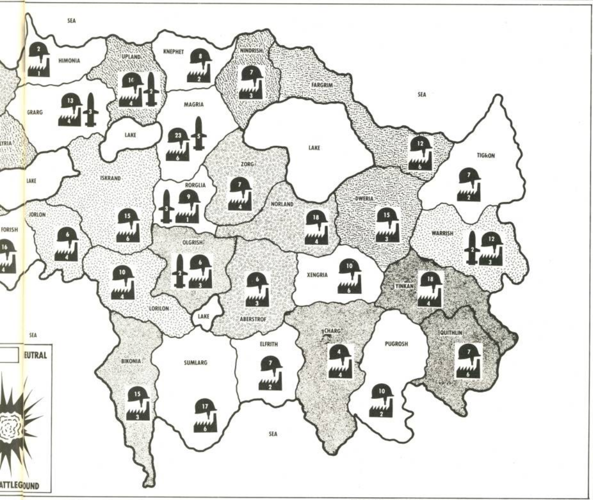
But a key feature is that having worked out the most popular moves, the computer then goes back and studies each individual's votes to see what would have happened if his team had moved as he suggested. The ten players for each team who submitted the moves which would have been most successful will gain extra votes, ranging from 100 for the most successful to 10 for the 10th most successful.

Entry form

Yes, I want to join the Final Conflict.
Name ....
Address ....
....
....
....

You MUST enclose a stamped self-addressed envelope

war-machines start to rumble


SEA
HIMONIA
2
1
UPLAND
10
4
2
KNEPHET
8
2
NINDRISH
7
3
FARGRIM
SEA
GRARG
13
4
3
MAGRIA
23
6
5
LAKE
LAKE
12
6
TIGkON
7
2
LYRIA
ZORG
7
4
LAKE
ISKRAND
15
6
RORGLIA
3
9
1
NORLAND
18
4
DWERIA
15
3
WARRISH
2
12
3
JORLON
6
4
FORISH
16
4
OLGRISH
2
6
3
10
4
6
3
XENGRIA
10
6
YINKAN
18
4
LORILON
LAKE
ABERSTROF
SEA
EUTRAL
CHARG
4
4
ELFRITH
7
2
PUGROSH
10
2
QUITHLIN
7
6
BIKONIA
15
3
SUMLARG
17
6
SEA
ATTLEGOUND

● How to vote

You must enter one vote for *every* country that your power controls. At present, each power controls FIVE countries, so you must make five votes.

First of all write down the list of your countries ALPHABETICALLY in the voting form. Then make your vote. It's possible to represent all the possible moves using just two letters.

BUILD ARMIES = BA
BUILD MISSILES = BM
BUILD FACTORIES = BF
BUILD SHELTERS = BS

For the ATTACK, LAUNCH MISSILE, REINFORCE, and SUPPLY orders, you use the letters A, L, R or S followed by the first letter of the country to be attacked, supplied, etc. So if you want the country Charg to ATTACK its neutral neighbour Xengria, you should vote AX. Similarly SUPPLY YINGAN would be SY.

Although some countries start with the same first letter, these are on different sides of the map, so there is no risk of confusion.

Name ....
Address ....
....
Membership code ....

Country	Vote
1.	
2.	
3.	
4.	
5.	

Post this form to The Final Conflict, Personal Computer Games, 62 Oxford Street, London W1A 2HG. All votes must arrive by first post on **May 31st** to allow us time to process them.

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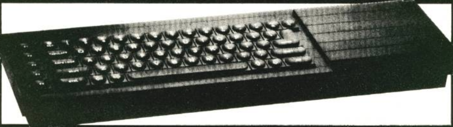

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◄ 35011 **Bongo** for a VIC 20 with 16K and joystick. Superb arcade game.

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25041 ► **Hunchback** for the BBC 'B'. Arcade action with colour graphics.

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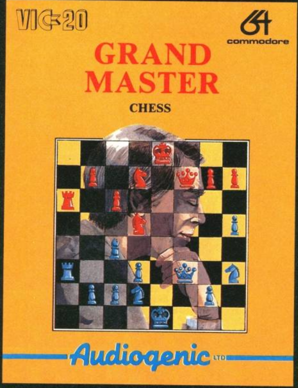

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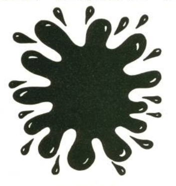

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The shops are stacked with home computer chess programs. But which of them are any good? To find out PCG has conducted its micro chess tournament of the year. At great expense we brought together eleven mighty artificial intelligences to struggle for days in a battle for supremacy.

We had some well-established masters of the micro – *Cyrus* on the Spectrum and *Acornsoft Chess* on the BBC – pitting their wits against such young pretenders as *Colossus* for the Commodore 64 and *White Knight MkII* on the BBC. In all, six micros were represented.

The contestants were divided into four groups as follows:

GROUP 1 (Memotech, ZX81 and Dragon).

MTX Chess
ZX81 Chess II
Oasis Dragonchess

GROUP 2 (ZX Spectrum)

Superchess 3.0
Cyrus IS
Master Chess

GROUP 3 (BBC)

White Knight MkII
Acornsoft Chess
Program Power Chess

GROUP 4 (Commodore 64)

Colossus 2.0
Grand Master

In each group the programs played each other twice. On the toss of a coin the winners of each group were paired in the semi-finals. These too were played over two games resulting in a gripping final game.

It should be remembered that chess programs can take an awfully long time to move at the higher levels. Because of this we selected on each game the level which took approximately 30 seconds to make its mind up; on most programs this is level 3. The final, however, was played at a higher level.

GROUP ONE

The games in group one were mostly typical of play at lower levels. The very first game was played between *ZX Chess II* and *MTX Chess* and turned out to be rather curious – a draw had to be called due to repetition of moves. Even stranger was the fact that both sides had adequate moves available. We can only presume that they were programmed without enough aggression.

The second game between these two opponents provided some more responsible play. *MTX Chess* displayed an impressive strategic intelligence. Although the program was considering possibilities for only one move ahead it made some shrewd decisions.

Still on group one, the oddest thing happened on the fourth game, *MTX Chess* v *Dragonchess*. On the 19th move, after *MTX Chess* had advanced a pawn, *Dragonchess* informed us of a draw. Not offering a draw, but actually calling a draw. This was utterly ridiculous. We entered the option to list the moves, and, lo and behold, *Dragonchess* had resigned! This was going too far, and as *Dragonchess* refused to let any more moves be entered we promptly awarded a win to *MTX Chess*.

GROUP TWO

This group, unfortunately, produced little of any interest. The only thing to note was that the improved *Superchess* from CP software does respond at great speed compared to other Spectrum chess games.

Due to a draw between *Cyrus* and *Masterchess*, *Superchess* topped the table with Cyrus and two more games had to be played, with *Superchess* emerging as the outright winner.

GROUP THREE

There was some particularly impressive play in this group – especially between *White Knight Mk11* and *Acorn Chess*.

White Knight doesn't have any book openings, but, after seeing two games with *Acorn Chess* it doesn't appear to have a weak opening defence either. Indeed *Acorn Chess*, which has a tendency to early attack (unusual in computer chess games) couldn't breach *White Knight's* defence.

The second game between the two, *Acorn* versus *White Knight*, was one of the outstanding games of the tournament. It demonstrates the fact that book openings are not the be-all and end-all of computer chess. *White Knight* demolished *Acorn Chess* in under half the time it took *Acorn* to make its moves. If chess games had emotions, *Acorn* would be in shock!

GROUP 4

The final group consisted of only two opponents, demonstrating a disappointing lack of chess games for what is an excellent machine. There was to have been a third contestant, *Sargon II*

ROUND 1 RESULTS

		PLAYED	WON	DRAWN	POINTS
GROUP 1	MTX CHESS	4	2	2	6
	ZX81 CHESS II	4	1	2	4
	OASIS DRAGONCHESS	4	0	2	2
GROUP 2	SUPERCHESS 3.0	6	3	2	8
	CYRUS IS	6	2	2	6
	MASTER CHESS	4	1	0	2
GROUP 3	WHITE KNIGHT MK11	4	4	0	8
	ACORNSOFT CHESS	4	0	0	0
	PROGRAM POWER CHESS	4	2	0	4
GROUP 4	COLOSSUS 2.0	2	2	0	4
	GRAND MASTER	2	0	0	0

mega-tournament. David Janda reports

which is now available from Softcell. Unfortunately this arrived too late in the contest.

Colossus 2.0 is the latest offering from Martin Bryant, author of the *White Knight* series. It is a grown-up version of *White Knight Mk11* and Bryant and CDS Microsystems, who market the game, reckon it will beat any micro chess game currently available.

Grand Master by Kingsoft of West Germany is made and distributed by Audiogenic, who also reckon it is something special. If this was a mixed-round tournament this game would have certainly come out in the top three.

Only two games were played between both, and they were pretty even. Both sides played to the bitter end, until there were just a few pieces on the board (this was particularly noticeable in the semi-final). The real difference between bad and good chess programs is what they do in the end-game with just a few pieces. Both games played well, but *Colossus* triumphed each time.

Note that the scores are **only** relevant for the games in each group. Please do not believe that *ZX81 Chess II* is stronger than *Grand Master* simply because it scored 4, and *Grand Master* scored 0.

The results for Group 2 also include two extra games between *Superchess 3.0* and *Cyrus IS;* this is due to a draw for first place.

Taking the winner from each group, a coin was tossed, and the pairing for the semi-final was MTX Chess v. *Superchess 3.0* and *Colossus 2.0* v. *White Knight Mk11.*

SEMI-FINALS

This section was more interesting in many ways compared to the group games. MTX Chess bids farewell, and the character of its play seemed to change dramatically. In the games between *White Knight Mk11* and *Colossus 2.0* it was plain to see that more positions per second were being examined by *Colossus,* and this is probably why it won. Here is a brief analysis of the four games played in this section.

MTX CHESS v. SUPERCHESS 3.0

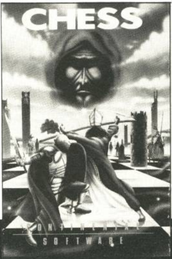
Not exactly a 'normal' start to this one; from the very beginning, *MTX Chess* advanced its pawns in an unusual manner. *Superchess* replied with king's knight dancing about the board. The endgame was disappointing for *MTX Chess.* Very bad defence of the king led to checkmate – all due to a lazy queen!

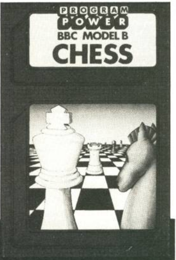
SUPERCHESS 3.0 v. MTX CHESS

Compared to the other games, *Superchess* played a bad endgame in this match. A good pawn advance was made on the g and h ranks but no pawn promotion was made.

SEMI-FINALS	PLAYED	WON	DRAWN	POINTS
COLOSSUS 2.0	2	1	1	3
WHITE KNIGHT MKII	2	0	1	1
MTX CHESS	2	0	0	0
SUPERCHESS 3.0	2	2	0	4

YOU REALLY SHOULD HAVE HAD HIM VACCINATED AGAINST COMPUTER GAMES!
Doctor JONES





By the mid-game the battle was firmly on. After a hectic exchange, both sides had their pawns pinned. This led to the remaining rooks and bishops galavanting about the board until the game was drawn due to the time limit being exceeded.

WHITE KNIGHT v. COLOSSUS 2.0

Colossus made good use of its rooks, especially with king's rook around the e rank. Better use could have brought Black to mate sooner, and because of this the game was unnecessarily drawn out.

No surprises as to the results really, as the scores in the table for the semi-finals shows.

COLOSSUS 2.0 v. SUPERCHESS 3.0

Finally, here is the most exciting of the two games in the final. The outcome was that *Colossus 2.0* won both games, and thus was declared the winner of the 1984 Personal Computer Games Chess Tournament.

Both sides quickly set up a knight and bishop within the first few moves. Two checks (one to each side) were made within seven moves, with *Superchess's* being the more constructive. *Superchess* brought its king's bishop down to g4+. This was a safe but useless check as White repelled it with pawn to c3. This made *Superchess's* bishop retreat to d6 – a very strong position.

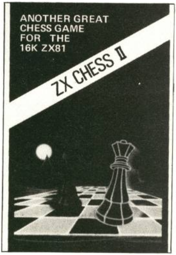
On the other hand, the early check from *Colossus* proved not to be so beneficial. Bishop b5-c6 brings on a hasty exchange of pieces which left *Colossus* the worse off, and the board fairly cleared.

The endgame of this match proved to be one of the most surprising. At around the 30th move, things looked as if they were going to settle down to a drawn out endgame – but far from it.

White's rook appeared to be doing nothing at c7, and with not many moves on the board it moved on up to make a desperate check at c8. This *looked* useless as it was, rightly, taken by Black's rook which was also on the eighth rank.

But out of the blue came White's queen from a defensive position by its king, and to check at c8. Black's king moved down to f7 – but a diagonal move by the queen to f5+ ensured that the king couldn't escape along the g/h ranks.

The end was near. White brought out its rook and advanced it to c8+, where mate was inevitable.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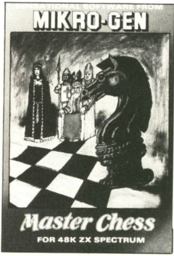

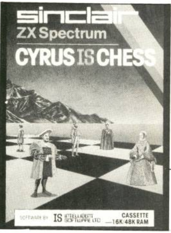

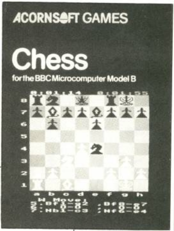

THE FINAL

1.	d2-d4	d7-d5
2.	g1-f3	c8-f5
3.	c1-f4	e7-e6
4.	e2-e3	b8-c6
5.	f1-f5	f8-b4+
6.	c2-c3	b4-d6
7.	b5xc6+	b7xc6
8.	f4xd6	c7xd6
9.	e1-g1c	a7-a5
10.	b1-d2	a8-b8
11.	d1-c1	g8-f6
12.	a2-a4	e8-g8c
13.	a1-a3	f5-d3
14.	f1-e1	f6-e4
15.	c3-c4	e4xd2
16.	f3xd2	d5xc4
17.	d2xc4	d3-e4
18.	f2-f3	e4-d5
19.	a3-c3	f7-f5
20.	c1-c2	c6-c5
21.	d4xc5	d6xc5
22.	c4-e5	d8-d6
23.	f3-f4	f8-c8
24.	e1-d1	d6-e7
25.	c2-d2	b8-b4
26.	c3-a3	e7-e8
27.	d1-a1	d5-e4
28.	d2-c1	c5-c4
29.	a3-c3	c8-b6
30.	e5xc4	e8-c6
31.	c4-d2	c6-d5
32.	c3-c5	d5-a8
33.	d2xe4	b4xe4
34.	c5-c7	a8-d5
35.	c1-c3	e6-e5
36.	c7-c8+	b8xc8
37.	c3xc8+	g8-f7
38.	c8xf5+	f7-g8
39.	a1-c1	g7-g6
40.	c1-c8+	d5-d8
41.	c8xd8+	g8-g7
42.	f5-f8+ (checkmate)	

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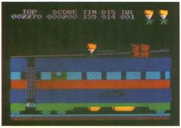
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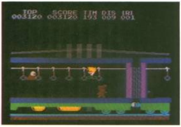
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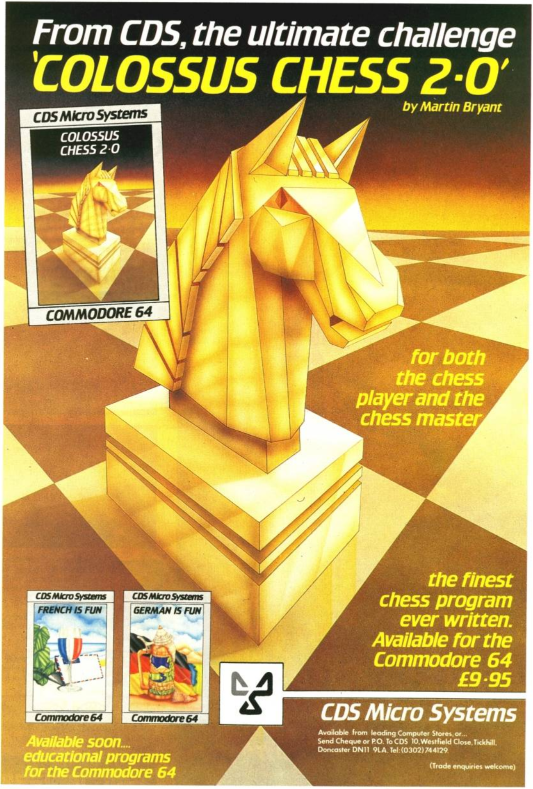
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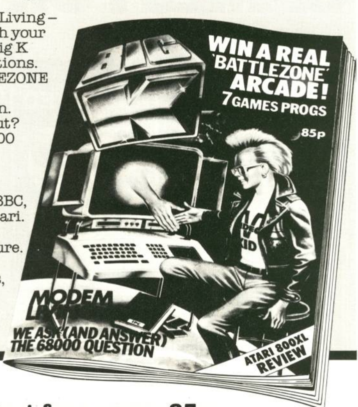
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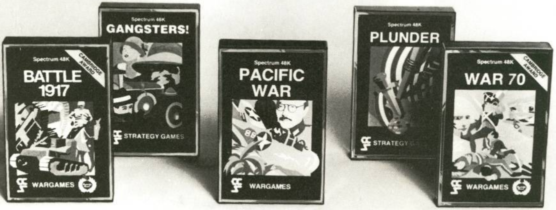
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There's been another rush of excellent games for the Commodore 64. Our three PCG Hits include a beautifully programmed shoot-'em-up, a compulsive underground treasure hunt and a zany game featuring a unicycle. You might think *Trashman* for the Spectrum is a rubbishy game, but no, we've named it a hit. It's just one among a mass of new Spectrum games.

Spectrum, BBC and Electron owners may notice that this month's colour screen shots for their machines are particularly clear. This is because we've used a new process which involves actually printing the contents of the screen on a colour plotter. Unfortunately the technique can't yet be used on the other micros, but maybe soon . . . This month's reviewers are Peter Connor, Steve Cooke, Chris Anderson, Stuart N Cooke, Tony Takoushi, Paul Turner, John Allan, Steve Mann, and Tony Harrington. Each of the game ratings are scored out of ten by the reviewer, and then double-checked by a second member of the panel. The PCG Hit and Game-of-the-Month titles are awarded only after heated office arguments.

So sit back and enjoy the world's greatest reviews . . .

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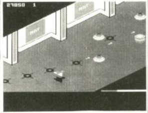

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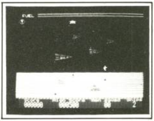

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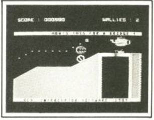

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Your rule is measured in months – my best is only 17 months.

Each month you are presented with the requests of various sectors, which you must grant or reject. But beware, your decisions may lose you the support of your allies. So if you are in doubt (and have some money left) you may profit from buying a status report from the State Security Organisation.

As each month passes, your financial state is shown along with a wide choice of options ranging from buying a private submarine (very useful for escaping dur-

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GAME: GET OFF MY GARDEN
MACHINE: COMMODORE 64
CONTROL: JOYSTICK
FROM: INTERCEPTOR, £7.90 CASS, £9.00 DISK

One thing will immediately become clear to you when you play this game: the authors have an extreme dislike of programmer Jeff Minter of Llamasoft. This seems a little unreasonable, since many parts of the game are copied from Minter's *Revenge of the Mutant Camels*, our February Game-of-the-Month.

The hero is a rather uninteresting-looking robot whose purpose in life is to water a garden. The robot moves under a running tap, and then to each of six plants causing them to bloom.

But ranged against him are a succession of attacking creatures just about as whacky as those in *Revenge*. They include chess pieces, chickens which explode into drumsticks, witches on broomsticks and glimmering LP records.

You get a different wave of attackers each time you manage to complete a garden, and there are a total of 64 – that's an awful lot of nasties for your money.

One helpful feature is that you can start the game at any of the first 32 waves. But you will still have the long-

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GAME: WHEELIN' WALLIE
MACHINE: COMMODORE 64
CONTROL: JOYSTICK
FROM: INTERCEPTOR, £7.00 CASS, £9.00 DISK

Wheelin' Wallie must be the only game in existence where you control a man riding a unicycle. Fortunately you don't have to worry about keeping your balance – all you have to do is make sure nothing knocks you off.

Wallie keeps moving to the right of the screen while the path moves up and down. If you sit out from your cycle too far it's possible to bang your head on the ceiling and lose a life. Other hazards to be avoided are bouncing balls and a rather cheerful-looking teapot which zooms across the screen.

As if avoiding the obstacles wasn't enough there are 'Power Pixels' scattered along the path. These must be gobbled up to score points.

If you survive long enough you have to make the water and bounce off this to reach the other side and the next level.

Now you not only have to avoid the nasties but you also find gaps in the path. Bridges span the gaps but they move backwards and forwards. If you don't time your crossing right Wallie will end up with no road beneath him and lose yet another life. There are another four pieces of action after this.

Wheelin' Wallie has an original feel to it. OK, eating dots may not be original. But the way in which Interceptor have included this in the game adds to the challenge. All of the graphics are large, colourful and move across the screen without any jerkiness.

If the graphics are good then the sound must be superb. No real sound effects exist in the game apart from a satisfying sound as you eat the dots and a scream when you get killed. But there is an excellent piece of music that plays at the start of the game, good enough to grace even the most expensive hi-fi.

If you're looking for a new game for your Commodore then I don't think you'll be at all disappointed with *Wheelin' Wallie*. **SNC**

GRAPHICS	8
SOUND	8
ORIGINALITY	9
LASTING INTEREST	8
OVERALL	8

PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG

GAME: FIRE ANT
MACHINE: COMMODORE 64
CONTROL: JOYSTICK
FROM: MOGUL, £7.95

A group of scorpions have crushed your army of ants. As the last remaining ant it is your mission to rescue the Queen Ant who is being held hostage in the scorpions' lair.

You must travel through eight different levels of the scorpions' home before you can find your Queen. On your way you will have to avoid contact with the inhabitants of the city or be killed. Scattered around the city are a number of objects which will help you in your task. Keys are obviously for opening doors but the uses of the other objects are left for you to find out, usually at the expense of a life. Objects range from bridge-building materials to supports that hold up the ceiling.

You have probably gathered that *Fire Ant* is a type of adventure. Unlike the traditional types of adventure the action takes place in real time in the form of an arcade game. No text needs to be entered, all you have to do is guide your ant around the maze picking up objects by passing over them.

Fire Ant is a simple game to play, all input being via the joystick. Even though it is simple, the most hardened arcade player will still find moving on from one layer to another very challenging.

Graphics are well up to standard and there are a couple of nice touches to the sound. For example, there's a superb rumbling sound whenever you cause a rockfall, although it doesn't quite compare with what some programmers are getting from the 64.

Mogul have produced one of those 'let's have another go' type of games. Being chased around a maze/city isn't original but Mogul have done an excellent job in making it appear so. Personally, I find it compulsive: so excuse me – I'm off to rescue a Queen Ant … **SNC**

GRAPHICS	7
SOUND	6
ORIGINALITY	7
LASTING INTEREST	9
OVERALL	8

ing a revolution) to asking the Kremlin for aid.

The program is very easy to use, well displayed and at times quite funny. On the minus side, the sound is poor and the graphics limited to oil cans, buildings and other such objects. My main moan must be about the 'Atari VCS'-style cardboard box which bent and looked tatty.

Still not bad as strategy games go, and certainly fun for all the family. Who's the great dictator in your household? **PT**

GRAPHICS	3
SOUND	2
ORIGINALITY	6
LASTING INTEREST	6
OVERALL	5

---

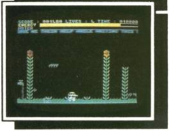
term challenge of seeing the last 32.

Two things let the game down. The first is a general lack of excitement. I think this is because the energy level on which your life depends rises and falls so rapidly that the loss of a life seems almost a random incident.

The second is the continual sniping at Minter. For example, the initials in the high-score table read: 'Blow a camel's head off today'. And the first attack wave includes graphics cribbed from *Revenge* and is called 'Remains of the Mutant Camels'.

Please, Interceptor, grow up. Stick to the game programming – you're really quite good at that. **CA**

GRAPHICS	8
SOUND	8
ORIGINALITY	3
LASTING INTEREST	6
OVERALL	7



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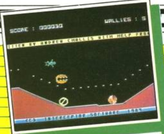
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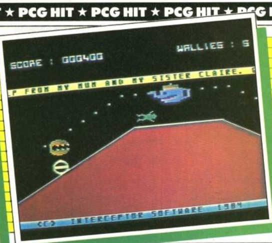
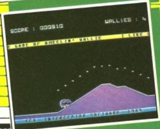
WALLIES : 5
(C) INTERCEPTOR SOFTWARE 1984


SCORE : 000400
WALLIES : 5
P FROM MY MUM AND MY SISTER CLAIRE.
(C) INTERCEPTOR SOFTWARE 1984


SCORE : 000510
WALLIES : 4
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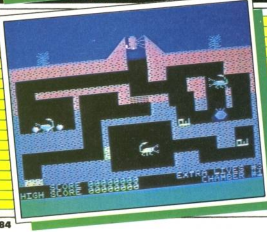
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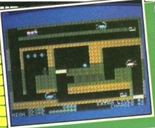
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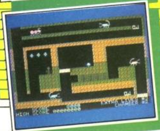
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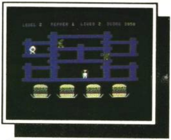
HIGH SCORE
EXTRA LIVES
CHAMBER

GAME: BURGER TIME
MACHINE: COMMODORE 64
CONTROL: KEYS, JOYSTICK
FROM: INTERCEPTOR, £7.00

It may not be quite the same at McDonald's, but making burgers computer-style is fun.

On the other hand, it's extremely unhygienic, because the technique involves walking over pieces of bun, meat and lettuce which are suspended at various points around a zany maze-like kitchen.

Treading over them makes them fall down a level and if you repeat this enough times you end up with four complete and juicy burgers at the bottom of the screen.



The complication is that you're being chased around the kitchen by Mr Hot Dog and Miss Egg who knock you out on contact. Your defence is to stun them momentarily by squirting a cloud of pepper into their path. Unfortunately your supply of pepper is very limited, and each time you complete a set of burgers, an extra egg or hot dog will join the chase.

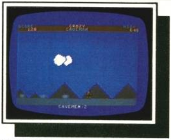
It was a good game in the arcades, and this rendering by Interceptor is excellent. Mouth-watering picture, appetising sound effects and a delicious rendering of the McDonald's tune. But you'll have to put up with Interceptor's continuing infantile snipes at Llamasoft – you are supposed to be making burgers from llama meat. **CA**

GRAPHICS	8
SOUND	7
ORIGINALITY	1
LASTING INTEREST	7
OVERALL	7

GAME: CRAZY CAVEMAN
MACHINE: COMMODORE 64
CONTROL: JOYSTICK
FROM: MERLIN SOFTWARE, £6.50 (CASS), £8.95 (DISK)

Crazy Caveman is heading for home after a hard day's hunting, and if this game is anything to go by then I'm not surprised there aren't any cavemen left alive today.

Our prehistoric pal can jump, move left and right, and swing his axe. To make it home he must first jump over some rocks as they roll along the ground towards him.



If he manages to get past the rocks, he must then wield his chopper and get the better of a herd of Tyrannosaurus Rex. After that it's a crowd of Dodos, and finally a flock of prehistoric birds who drop rocks on him.

The graphics and sound are fine, but you'll need to put in an awful lot of practice before you can be sure of a decent game. I doubt there's enough here to keep you, or even a caveman, interested for very long. **CA**

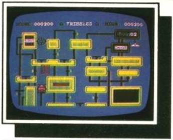
GRAPHICS	6
SOUND	5
ORIGINALITY	6
LASTING INTEREST	4
OVERALL	5

GAME: TRIBBLE TROUBLE
MACHINE: COMMODORE 64
CONTROL: KEYS, JOYSTICK
FROM: MR MICRO, £6.90

Here's trouble. You're transporting a spaceship load of friendly Tribbles and someone leaves open the door to their cells.

One by one the Tribbles leave and begin wandering through your craft whose workings, judging from the screen picture, were designed by Heath Robinson.

The aim of the game is to catch each Tribble before it reaches the cargo transporter and gets fizzled. You do this by moving a grille around the screen, trying to place it in the Tribble's path.



The silly creature doesn't follow a predictable route, but it's quite easy to outwit it until a 'Wafoid' and a 'service droid' appear. They steal the grille and generally cause havoc.

The action is accompanied by noisy sound effects, and there's a catchy tune to start you off.

But although the game is very different and quite enjoyable, there's basically just one screen of action, and I wonder how long interest would be maintained. **CA**

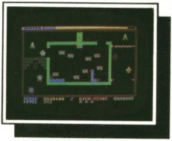
GRAPHICS	5
SOUND	5
ORIGINALITY	8
LASTING INTEREST	4
OVERALL	5

GAME: DINKY DOO
MACHINE: COMMODORE 64
CONTROL: JOYSTICK, KEYS
FROM: SOFTWARE PROJECTS, £7.95

Childish nightmares provide the scenario for this simple but infuriatingly addictive game.

A cheese sandwich too many has landed Dinky in a world peopled by the revolting creatures of his subconscious. The only way out to the safety of his mummy's room is by drinking the hot milk. The problem is to get to it.

Dinky starts on the left-hand side of the screen and has to evade obstacles and monsters in order to reach his milk on the opposite side. If he gets there and drinks it all up then the monsters turn into succulent cherries to be gobbled for bonus points. Then it's on to the next screen.



Although the graphics and sound are not spectacular, *Dinky Doo* is a compelling game because you really want to get through those 15 screens. And get back to mummy. **PC**

GRAPHICS	6
SOUND	5
ORIGINALITY	6
LASTING INTEREST	8
OVERALL	7

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EXCITEMENT!

KILLER WATT

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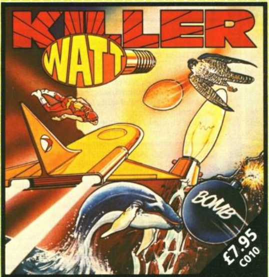

Explore the eerie darkness of an underground cavern and smash the 12 brilliant light bulbs there to reach the next level. Watch out for the flying humanoids, carnivorous fish and deadly pterodactyls! Blast through the magical gateway, and you will be transported to the start of the next challenge. Joystick compatible.

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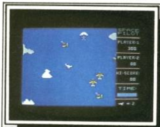


GAME: SPACE PILOT
MACHINE: COMMODORE 64
CONTROL: KEYS, JOYSTICK
FROM: ANIROG, £7.95

Space Pilot has flown straight out of the arcades where it appeared under the name *Time Pilot*.

You zoom about the screen blasting away at enemy fighters. The cloud-filled sky scrolls about you as your opponents wheel in from all directions.

There are five different levels, each belonging to a different time zone. First you battle it out with vintage bi-planes in 1919. Next it's pranging Jerries in the Second World War. In the 1970s you face helicopter gunships, followed by jets in 1984 and flying saucers in 2001. You must destroy 56 enemies in each zone before moving on to the next level.

Sometimes pilots bale out, and you

GAME: ODYSSEY
MACHINE: COMMODORE 64
CONTROL: JOYSTICK
FROM: K-TEL, £6.95

Odyssey is a five screen shoot-'em-up which tries to combine *Space Invaders*, *Scramble*, and a host of other features in one game.

There's more to this game than meets the eye – and certainly more than appears in the instructions. In the first screen you must eradicate numerous Plague Pests, avoid Robo-Crabs, and destroy Egg Bombs.

The scenario is complicated to say the least, and I found myself failing dismally in my first missions without exactly knowing why.

Once you've sorted out your tactics and worked out the scoring system *Odyssey* becomes rather more enjoy-

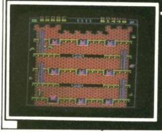
GAME: ZYLOGON
MACHINE: COMMODORE 64
CONTROL: JOYSTICK
FROM: BIG G, £6.95

Zaxxon, on which this game is based, was one of the most popular arcade games of 1983. *Zylogon* doesn't quite make the same grade.

Your ship is piloted across a scrolling band of blue and light blue geometric shapes. It can move up and down, left and right, and must avoid the various defences of the Zylogons as it goes.

There are five different levels of play, which don't change the content of the game, but speed up the action. Level 5 is quite tricky whereas level 1 is a doddle.

The Zylogons don't seem to be very imaginative in the construction of their defences. As in *Zaxxon* you must fly either over or under obstacles placed in



GAME: CITY ATTACK
MACHINE: COMMODORE 64
CONTROL: JOYSTICK
FROM: K-TEL, £6.95

You'll be very impressed by the first few seconds of this game. Up on the screen comes the city you have to protect. It's very pretty and extends over about five screen widths. Well worth protecting.

A slight disappointment sets in when you see the spacecraft at your disposal, a rather primitive model, little more than a purple hexagon.

Never mind, it flies very smoothly and makes a super noise when you fire. But then the aliens start to arrive. Oh dear. They appear to have escaped from a discarded *Space Invaders* machine: small coloured shapes with no detail and little animation.

Actually there are three main types of aliens: the airborne invaders, a little row of 'commandos' and a swirling neutron

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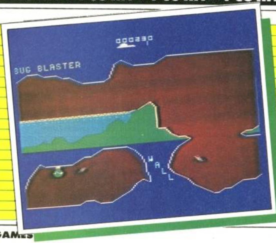

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can pick them up in mid-air for bonus points. The opposition will occasionally attack in squadrons of six craft, whereupon you again have a chance of a bonus if you blast them all before they leave the screen.

As the technology of your opponents advances they become progressively harder to destroy, and will fight back with guided missiles and bombs. Shoot the missiles and bombs as well if you can.

You don't have to keep count of how many planes you've shot – as soon as you've notched up the magic number on level 1, a Zeppelin appears. Shoot that and you're on to the next screen. The higher levels are completed in similar, but modern, style.

The graphics are very good, though your plane does look a bit like a duck.

Combined with the action and acceptable sound they make *Space Pilot* a very enjoyable romp through the skies. **SC**

GRAPHICS	7
SOUND	6
ORIGINALITY	1
LASTING INTEREST	9
OVERALL	8

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able. However one or two of the five screens (the fourth in particular) are very difficult to negotiate. Don't go for this game unless you're prepared to spend a lot of time practising.

In the second screen, you must score five hits on an egg, which is jealously guarded by four of the aforementioned Robo-Crabs. Failure to complete your mission means that the egg hatches and you must now wrestle with – wait for it – a Giant Killer Robo-Crab. Difficult to hit, but not very exciting to look at.

The fourth screen is a *Scramble* spin-off, where you face a number of different craft each of which has some particularly nasty way of costing you a life. Some just rush at you, while others bob up and down, and then suddenly drag you to oblivion without warning.

The graphics in *Odyssey* aren't wildly exciting, and the sound doesn't make much use of the Commodore's facilities. The scope of the game makes it a slightly better buy than the average shoot-'em-up, but give it a miss if you like your games to have the simple touch. **SC**

GRAPHICS	6
SOUND	4
ORIGINALITY	6
LASTING INTEREST	6
OVERALL	6

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your way. You must also bomb fuel dumps to replenish your tanks.

Every so often you leave the scrolling landscape to do battle with alien ships in deep space. These sequences aren't particularly exciting, but they do provide some variety.

Then it's back to the last waves of missiles and rockets, and last but not least (but almost least) a large robot who blasts away at you.

The robot is a bit of an anti-climax. He's very easy to shoot, and the only threat is from the missiles he hurls at you which are very difficult to spot as they blend in with the background.

Once you've killed the robot it's back to the beginning with a new supply of ships, and the same task to accomplish all over again.

The best thing about the original *Zaxxon* was the display. *Zylogon*'s graphics aren't exactly stunning, and the game doesn't have the compulsion of a good shoot-'em-up, which means you're better off looking elsewhere. **SC**

GRAPHICS	5
SOUND	4
ORIGINALITY	3
LASTING INTEREST	4
OVERALL	4

---

cloud which is accompanied by a guided fireball.

None of these is very impressive to look at. But the game does have a certain compulsion, because each alien wave is destroyed in a different way.

The invaders you take out a row at a time, firing straight up as in the original game.

You're just getting into this when a dinky little tune starts playing to alert you to the commandos running along the bottom of the screen. The best way of obliterating them is to move ahead of them, get down to head-level and then open fire. Brutal but effective.

To get the neutron cloud you have to hit its centre from directly overhead.

You can fire in any of four directions by pointing the joystick while you press the fire button. But you can't fire and move at the same time.

Despite the graphical limitations, the game is nicely presented with 14 different levels, including one K-Tel have thoughtfully provided for you to practise on.

So, a strange mixture. Some very advanced features, some very primitive. Look before you fork out the cash. **CA**

GRAPHICS	4
SOUND	7
ORIGINALITY	5
LASTING INTEREST	6
OVERALL	5

★ **PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG**

GAME: KILLER WATT
MACHINE: COMMODORE 64
CONTROL: KEYS, JOYSTICK
FROM: ALLIGATA, £7.95

The movement in this game is so smooth you won't need your air sickness pills before take-off.

The action takes place in a giant underground cavern through which you pilot a spacecraft. The cavern extends across about seven screen widths and the sideways scrolling of the picture is achieved without the slightest hint of a flicker. Quite superb.

Your mission is to destroy 12 lightbulbs, yes lightbulbs. They make a lovely ping when you hit them.

The monsters are strange as well. There are wonderful leaping whales which look suspiciously like dolphins and are so lifelike you feel guilty shooting them.

Then there are mechanical birds which have a comical flying method but lay deadly green eggs.

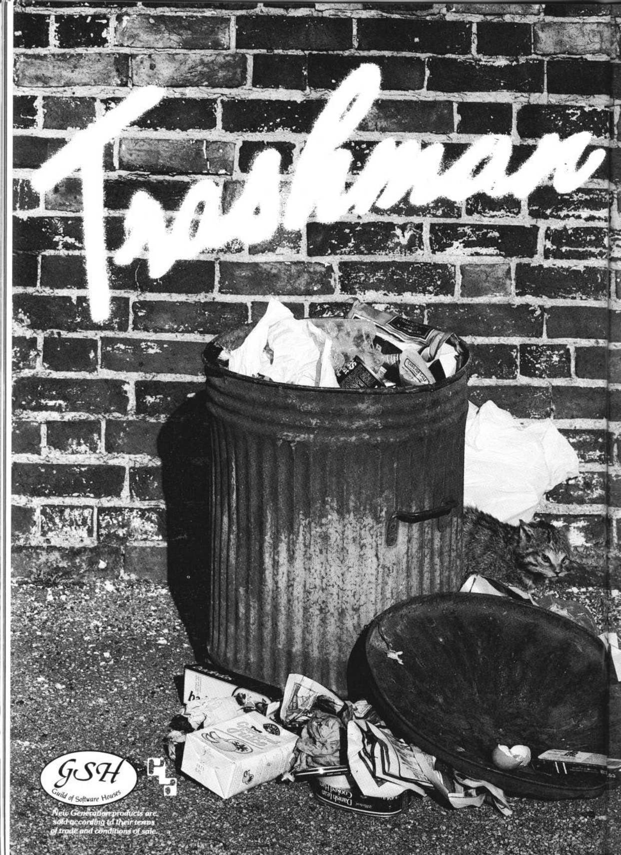
On higher levels you'll have to cope with running ducks, and vicious, bouncing snowballs. But you have the option of arming yourself with shields which allow you several otherwise-fatal contacts. The shields even let you fly straight through the cavern's thinner walls if you're feeling reckless.

Control of the spacecraft takes some practice because once you start it moving in one direction, it'll keep moving until you apply thrust in the opposite direction. But this, and the smoothness of movement, give the game an amazingly realistic feel.

It also offers you just the right playing options. There's an easy level which you'll need for practice. You can turn off the accompanying music – a slightly wonky rendering of Bach's B minor fugue. And the choice of control keys for non-joystick users is very sensible.

At the same time there is enough challenge at the higher levels to keep you occupied a long time. Believe me, this game will RUN and RUN. **CA**

GRAPHICS	9
SOUND	8
ORIGINALITY	6
LASTING INTEREST	8
OVERALL	8


Trashman
GSH
Guild of Software Houses

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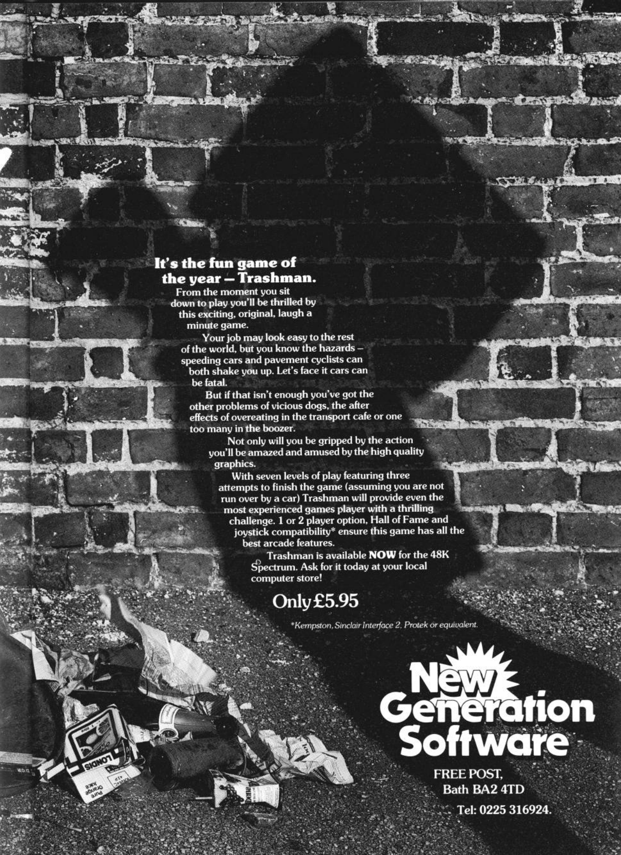

It's the fun game of the year – Trashman.

From the moment you sit down to play you'll be thrilled by this exciting, original, laugh a minute game.

Your job may look easy to the rest of the world, but you know the hazards – speeding cars and pavement cyclists can both shake you up. Let's face it cars can be fatal.

But if that isn't enough you've got the other problems of vicious dogs, the after effects of overeating in the transport cafe or one too many in the boozer.

Not only will you be gripped by the action you'll be amazed and amused by the high quality graphics.

With seven levels of play featuring three attempts to finish the game (assuming you are not run over by a car) Trashman will provide even the most experienced games player with a thrilling challenge. 1 or 2 player option, Hall of Fame and joystick compatibility* ensure this game has all the best arcade features.

Trashman is available **NOW** for the 48K Spectrum. Ask for it today at your local computer store!

Only £5.95

**Kempston, Sinclair Interface 2, Protek or equivalent.*

New Generation Software

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GAME: SORCERY
MACHINE: SPECTRUM 48K
CONTROL: KEYS
FROM: VIRGIN, £5.95

The evil Necromancer and his demonic servants have conquered the land. All the people of the Earth have been enslaved. All the great sorcerers are being held captive except for one – you.

Your mission is to rescue your fellow sorcerers and save the Earth before it is plunged into eternal darkness. You will have to be quick as time is running out.

Sorcery is a 15-screen arcade adventure. Your sorcerer starts somewhere on the right-hand edge of the screen and you must reach the gate on the left to get onto the next level. Demonic servants have been sent by the Necromancer to stop you so you must watch your energy when you go into battle with them; if it reaches zero you're dead.

A very good title screen sets the atmosphere. Old-fashioned lettering scrolls across the TV set, wishes you good luck and tells you the control keys. Unfortunately, the choice of keys is particularly silly. The left and right keys are one above the other and would have been easier to use if they had been on the same row of the keyboard. The scenes all have a title. You start in a

---

GAME: BLADE ALLEY
MACHINE: SPECTRUM 48K
CONTROL: KEYS, KEMP
FROM: PSS, £5.95

At last! Buck Rogers hits the Spectrum. This is a version of the game in which you guide a spacecraft as it hurtles through a corridor battling a succession of alien attackers.

The game's interest stems from the 3D view you are given, with the enemy looming larger as they approach. Considering the Spectrum's limitations, this is done pretty impressively. Your craft moves smoothly as it swerves from side to side, and its height along with those of the alien ships is shown convincingly by the use of shadows.

But the depiction of the corridor walls is not nearly so impressive as in versions on more powerful machines. The bands which make up the walls simply flash alternately blue and magenta and it takes some effort to imagine that you really are rushing forward.

That aside, the 3D effect is among the best going on the Spectrum. The perspective has been worked out well – for example, to destroy aliens you must not only get in line with them but also move your craft to the same height, using the shadows as a guide. You then take a

---

GAME: TERRY'S TRAVELS
MACHINE: SPECTRUM 48K
CONTROL: KEYS
FROM: ALGRAY SOFTWARE, £5.50

You must move *Terry Turtle* up the screen, across busy roads, log-jammed rivers, and through mazes to get him home.

You can define your own movement keys, a facility that always makes a game just that little bit more playable. Another nice touch is the sound – Algray have managed to cram some speech synthesis routines into the program.

Every time you lose one of your five lives your Spectrum passes comment – usually inappropriately. Get run over and it shouts 'Roadhog!'. Fall in the river and it also shouts 'Roadhog!'. Hmmm ... full marks for effort but this effect remains a curiosity and doesn't add much to the game.

The first stages of the game are really just a watered down version of *Frogger*. Getting Terry across the roads is difficult enough, but the rivers are almost impossible. After a while the inappropriate comments and repetitive sound get on your nerves.

If you've enough patience and endurance you then have to navigate a maze

---

GAME: TIMEBOMB
MACHINE: SPECTRUM 16/48K
CONTROL: KEYS, KEMP
FROM: CDS, £5.95

This game is another version of the arcade game known as *Defusion* or *Gridtrap*.

There is already a version of this game for the Spectrum by K-Tel, and one on the Commodore 64 by Livewire. This model stands up well in comparison.

Your man hops from one square to another on a large grid. Other squares are occupied by flags, skulls, and a time bomb on which the amount of time left till the explosion is shown rapidly decreasing.

Using sensible control keys you must guide the figure to the bomb in order to defuse it, whereupon another bomb will appear somewhere else and he must repeat the process to save his three lives.

Having defused six bombs you progress to the next level, which is made more risky by the presence of up to four boots. These stamp angrily about the screen and will flatten you given half a chance.

A life is also lost each time you bump into a skull. Further complications are introduced by the fact that you cannot cross a square twice. Pick up the flags for bonus points.

Each time you step on a square it

★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG

GAME: TRASHMAN
MACHINE: SPECTRUM 48K
CONTROL: KEYS, CRSR, KEMP, SINC
FROM: NEW GENERATION, £5.95

Trashman is an entirely original game, with great graphics and some very amusing touches.

You have applied for the job of trashman. Your task is to collect the bins from outside the houses, take them to the waiting van, dump the contents, and return them whence they came. Your first day's work calls for you to empty just five bins in Montague Road.

Well, believe me, it IS a day's work. As you frantically rush up and down the street, your bonus is rapidly shrinking. Once it reaches zero you are given a warning that you had better work faster in future or else. You are then given the same assignment all over again.

Every time you tread on the grass or bump into a hedge, your bonus reduces dramatically. The way things are, you have only just enough time to complete the task – and then only if you do it faultlessly.

Imagine my horror then when having finally managed to empty the bins in the allotted time, I was rewarded with the prospect of emptying SIX bins in another road. At that point I gave up in despair.

Trashman has some very nice touches. Some of the houses harbour horribly yappy little dogs that run out and bite your leg. People invite you into their homes for all manner of reasons and cars whizz to and fro along the busy street. The trouble is you're too busy emptying bins to stay in the game to appreciate these finer points of programming.

Emptying bins in real life is hard work. *Trashman* is no different. Don't expect to do well at this game without putting your back into it.

SC

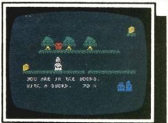
GRAPHICS	9
SOUND	5
ORIGINALITY	9
LASTING INTEREST	7
OVERALL	8

forest and must pass through wastelands and castles before you reach your goal. Graphics are above average and the forest scenes have excellent trees. Neither the monsters nor yourself are animated, but everything does move smoothly.

All of the screens are easy to get through but the cumulative effects of battling with the monsters make it difficult to get beyond screen eight.

Sorcery will never become a cult game like *Atic Atac*. However, it will no doubt be taken out of the cassette box a fair few times. **SNC**

GRAPHICS	8
SOUND	5
ORIGINALITY	7
LASTING INTEREST	7
OVERALL	7

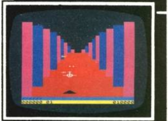

YOU ARE IN THE WOODS.
WITH A SWORD. 70 %

quick shot before swooping away to avoid a fatal collision.

This takes considerable practice, and it's just as well, because that's about all there is to the game. The enemy attack one at a time and it's merely a question of shooting as many as possible

Eventually, this takes you on to a new screen, but although the background changes in each of the six different screens of action, the actual game and tactics remain much the same. You may find that it will not retain your interest for very long. **CA**

GRAPHICS	8
SOUND	5
ORIGINALITY	5
LASTING INTEREST	5
OVERALL	7

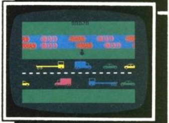


before Terry finally makes it home. It'll take a lot of practice before you get that far and I suspect that by the time you succeed you'll be wishing you'd spent your money on something else.

The graphics aren't particularly exciting. There's a high score table that only accepts names of four letters, and every time you get a high score the machine sputters out the words 'Great Score!'. I scored 0 the first time round and was still congratulated and asked to enter my name.

Despite the effort that has obviously gone into this program, I don't think I'd travel far to add it to my collection. **SC**

GRAPHICS	5
SOUND	7
ORIGINALITY	4
LASTING INTEREST	3
OVERALL	4

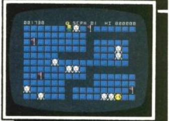


turns black. Should you find yourself cut off by black squares, you can scroll the row you are standing on left or right until a coloured square appear either above or below you. You can then get on with your task.

The graphics are excellent for a 16K game, and as an extra bonus your Spectrum plays Beethoven's 'Für Elise' as you move round the grid. Perhaps we can now expect a Spectrum game with full orchestral and stereophonic sound-effects.

This is a good implementation of an old favourite, and the fact that it's been squeezed into 16K is an extra bonus. **SC**

GRAPHICS	7
SOUND	7
ORIGINALITY	3
LASTING INTEREST	6
OVERALL	7



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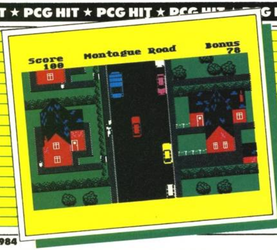
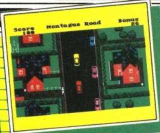
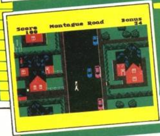






GAME: 1994 (TEN YEARS AFTER)

MACHINE: SPECTRUM 48K

CONTROL: KEYS

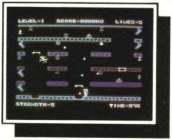
FROM: VISIONS, £6.95

GRAPHICS	6
SOUND	4
ORIGINALITY	3
LASTING INTEREST	4
OVERALL	5

According to Visions, George Orwell got it wrong and the Central Computer didn't take over the world until 1994, hence the subtitle 'Ten Years After'. You play the one person who has dared to challenge the computer and plans to penetrate the eight levels of security to switch the computer off.

The scenario sounds exciting enough but the actual game reminds me of the Spectrum classic *Manic Miner* where you guide Miner Willy through a number of caverns. Substitute Smiffy for Willy and you've got the whole idea of the game.

On each level you have to collect the key and insert it into the lock which will take you on to the next level. To make your task difficult the computer has deployed its security cameras which fire plasma bolts at you, together with jelly droids, buzz saws and springs.



Smiffy has a certain number of power points per life and contact with any of the nasties knocks one point off this. Once his power reaches zero he dies and you have to start the level again. The only things that will actually kill Smiffy with one touch are the electric floors.

Unfortunately the game lacks some of the appeal of its forebear. The graphics are fairly basic and movement is a little slow.

Only having eight levels, the game is little repetitive. The graphics are the same on each level, only the layout differs. It is harder to get through a level than on other similar games but with so few levels it would need to be.

1994 is a very difficult game to play but lacks rather a lot of the polish that we have come to expect from Spectrum games. If you like platform-type games and are looking for a new one to try, you may enjoy it, but the chances are that you will soon be dissatisfied. **SNC**

GAME: AD ASTRA

MACHINE: SPECTRUM 48K

CONTROL: KEYS, KEMP, SINC, CURS

FROM: GARGOYLE, £5.95

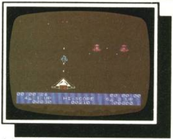
GRAPHICS	9
SOUND	6
ORIGINALITY	5
LASTING INTEREST	7
OVERALL	8

The first impression of this program is stunning. Your spaceship sits there against a starry backdrop. Suddenly a huge, round, cratered asteroid hurtles toward you, followed immediately by three or four others.

The 3D effect as they roll toward you is superb. You actually see their cratered-surfaces rotating.

These asteroids are indestructible. You simply have to get out of the way by using left-right, up-down controls, or a joystick.

After the asteroids, the real action starts with two types of spaceship homing in, guns blazing. The 3D effect here is less impressive, but you will have your work cut out to stay alive. You have to dart rapidly all over the screen to avoid the spreading missiles.



Meanwhile you maintain a rapid fire-rate, sending laser bursts shooting into the distance in a beautifully realistic manner.

Failure here results in the destruction of your craft in an extremely spectacular explosion. Success will eventually lead to another attack of asteroids followed by a new wave of aliens. This second wave is not convincingly 3D at all, looking more like a set of nasties out of *Arcadia*.

One frustration with this game is that after losing each of your five lives, you must return to dodging the asteroids again. Although they're spectacular to look at, they're quite easy to dodge and you'd much prefer to spend your time dealing with the real action. As it is, the pace of the game is constantly interrupted.

So, hard to know how to rate *Ad Astra*. On the one hand some of the graphics are as good as you've ever seen on a Spectrum. On the other hand parts of the game don't work quite as well as they really ought to. **CA**

GAME: BULL RUN

MACHINE: SPECTRUM 16/48K

CONTROL: CURSOR KEYS

FROM: PHIPPS ASSOCIATES, £5.95

GRAPHICS	3
SOUND	3
ORIGINALITY	7
LASTING INTEREST	1
OVERALL	2

The cassette cover says LOAD "BULL" and that's exactly what this game is.

The basic idea is fine. You have to trap an escaped bull by picking up pieces of fence and positioning them around the animal.

One could even almost forgive the graphics, despite the fact that the tiny character-size drawings which represent you and the bull jerk around the screen like penguins on pogo-sticks.

What's unforgivable is that the game uses an almost impossible combination of keys, and when (after a few seconds) your single life is used up, it forces you to sit through a long and utterly uninteresting pre-game routine before you can start again.

The keys are the cursor keys for movement plus 'P' to pick up a fence and 'D' to drop it into position. Easy to remember. Ludicrous in actual use.

It's just possible that if you put in hours of frustrating effort, you might get to the point where the game became enjoyable. But much more likely you'll give up, gored and bored. **CA**

GAME: PENGY

MACHINE: SPECTRUM 16/48K

CONTROL: CURSOR KEYS

FROM: MICROMANIA, £5.95

GRAPHICS	4
SOUND	4
ORIGINALITY	1
LASTING INTEREST	4
OVERALL	3

The game in which you have to slide ice blocks and electrify fences to kill the snow bees. The main trouble with this version is that it uses the dreaded cursor keys. Hours of frustration guaranteed unless you have a cursor joystick. **CA**

Wheelin' Wallie

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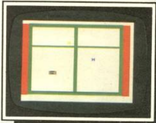
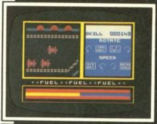


GAME: BUTTERFLY
MACHINE: SPECTRUM 48K
CONTROL: KEYS
FROM: PULSONIC, £2.99

Another cheapo game from Pulsonic, who are to be congratulated for lowering software prices, but severely reprimanded for offering this particular specimen to the general public.

A spider must eat butterflies to stay alive. Sparse graphics, jerky movement, Basic program. For far better value for money, try typing in one of the PCG listings. **SC**

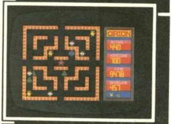
GRAPHICS	2
SOUND	1
ORIGINALITY	5
LASTING INTEREST	1
OVERALL	2



GAME: KNIGHT DRIVER
MACHINE: SPECTRUM 48K
CONTROL: KEYS
FROM: HEWSON CONSULTANTS, £5.95

Knight Driver puts you behind the wheel of a small car, confined to a small display on the right of the screen. The rest of the screen is taken up with either a fuel gauge or (at the higher skill level) information on lives remaining and a large flashing panel which looks pretty but doesn't add anything to the game.

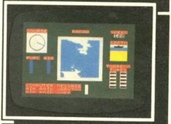
There are two levels of play – learner driver and professional – and a demo mode. As a learner driver you must steer your car round the track while your fuel runs out steadily. When it runs out you finish and will be presented with a progress report based on the score you managed to clock up.



GAME: ORION
MACHINE: SPECTRUM 48K
CONTROL: KEYS, KEMP
FROM: SOFTWARE PROJECTS, £5.95

Simple maze game in which you rescue androids while avoiding various nasties. You have to go through 25 different mazes in a 5 × 5 grid, but they're all much the same. The characters are small and don't move smoothly. Why waste money on what's basically another *Pac-Man* variant? **CA**

GRAPHICS	3
SOUND	4
ORIGINALITY	2
LASTING INTEREST	4
OVERALL	3

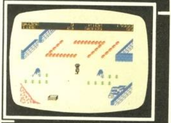


GAME: SUBMARINE STRIKE
MACHINE: SPECTRUM 48K
CONTROL: KEYS
FROM: PULSONIC, £2.99

Your submarine is loaded with ten torpedoes. The enemy is trying to move its ships from one base to another. Your mission is to stop as many ships as possible.

The submarine 'Spectrum' is one of the most advanced of its time. An on-board computer will give you any information that its sensors are able to discover about the enemy shipping. It jars that such a sophisticated machine has a cutesy way of responding with a 'Hi There!' and a jingle every time you communicate with it.

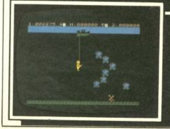
While hunting for the enemy your sub is under constant threats: from land-based guns; air attacks if you stay too



GAME: PEDRO
MACHINE: SPECTRUM 48K
CONTROL: KEYS, FULL, SINC, KEMP, CUR
FROM: IMAGINE, £5.50

Stop the animals from eating the plants by jumping on them. Make sure the tramp doesn't steal the seeds. The same game as the Dragon version reviewed elsewhere. Surprisingly the Dragon version is better, this one being very difficult to control. **SNC**

GRAPHICS	6
SOUND	5
ORIGINALITY	8
LASTING INTEREST	5
OVERALL	5



GAME: GLUG GLUG
MACHINE: SPECTRUM 48K
CONTROL: KEYS, PROT, KEMP
FROM: CRL, £5.95

The final frontier is no longer space, but the mysterious world beneath the waves where strangely beautiful creatures glide up your mask and block your snorkel.

A little diver hangs by an airline from a boat on the surface. Armed with a spear-gun (and limitless spears), his task is to collect three items of treasure from the sea-bed beneath him.

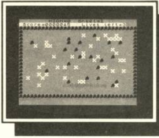
There are 32 screens in *Glug Glug*, and the player's objective is the same in each one. The game isn't as easy as all that, though. In each screen there are all manner of marine nasties on the look-out for you.

Fish swim to and fro, jellyfish drift towards you, piranhas appear in shoals and follow you relentlessly, and crabs

GAME: WORM ATTACK
MACHINE: SPECTRUM 48K
CONTROL: KEYS
FROM: PULSONIC, £2.99

GRAPHICS	3
SOUND	3
ORIGINALITY	2
LASTING INTEREST	3
OVERALL	3

Guide the worm around the garden eating crosses and avoiding black dots, the garden wall, and your own tail. Pulsonic apparently needed 48K for this program but it could have fitted into less than 16. Poor graphics, awful control keys – this is one of the cheapest games for the Spectrum and it shows. **SC**



As a professional driver you don't have to watch the fuel gauge, but you have five lives and must avoid all collisions if you don't want to lose any of them.

The trouble with *Knight Driver* (apart from the cramped display) is that the progress reports take so long that waiting for another chance to play becomes rather frustrating. The first time they flash on the screen they're mildly amusing. The tenth time they're not.

The controls are rather fiddly, you need quick reactions to get round the bends. Sometimes it's more fun *not* going round, but crashing through the barrier and driving off through some rather crudely displayed trees and buildings.

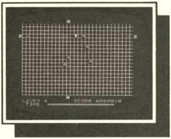
Knight Driver is one of those games that would be great value at £2.50, or if it could fit into 16K, but must otherwise be considered a rather uninspiring game, unlikely to have the motor-power to keep up with the competition. **SC**

GRAPHICS	6
SOUND	5
ORIGINALITY	3
LASTING INTEREST	4
OVERALL	5

GAME: GRID PATROL
MACHINE: SPECTRUM 16/48K
CONTROL: KEYS, CURSOR JOYSTICK
FROM: LOTHLORIEN, £5.95

GRAPHICS	4
SOUND	6
ORIGINALITY	4
LASTING INTEREST	5
OVERALL	5

Superhuman reflexes are required as you dodge laser bolts and blast robots on a grid. Sometimes you're killed before you've even had a chance to move, or wonder why this game is so familiar. To find out, play Hewson Consultants' *Di-Lithium Lift* – reviewed elsewhere in this issue. Anyone getting a high score has my admiration. **SC**



long on the surface; and suffocation if you stay underwater too long. It's also possible to run aground if the water is too shallow and the enemy ships have a nasty habit of fighting back if you attack them.

Luckily for you your computer will give you advance warning of impending danger allowing you to take evasive action. Ignore its advice at your peril!

A radar helps you track down enemy ships and shows where the land masses are. This is a very good display even if it does scan a little on the slow side. Meters are given to monitor fuel and air supplies. You can refuel at one of the fuel dumps which are marked on your charts. You automatically take on air when you surface – a small diagram on the right of the display shows whether your sub is on the surface or submerged and how much water is beneath you.

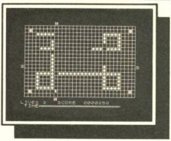
Submarine Strike is a slow game to play but that doesn't mean that it isn't exciting. Once you get the scent of an enemy ship it will be full speed ahead and no mercy will be shown. **SNC**

GRAPHICS	6
SOUND	3
ORIGINALITY	5
LASTING INTEREST	7
OVERALL	7

GAME: DI-LITHIUM LIFT
MACHINE: SPECTRUM 16/48K
CONTROL: KEYS, KEMP
FROM: HEWSON CONSULTANTS,
£5.95

GRAPHICS	4
SOUND	6
ORIGINALITY	4
LASTING INTEREST	6
OVERALL	5

Rush about a grid clearing dots and avoiding cross-fire from four enemy laser bases on the perimeter. Very fast action in a game written by the man who brought you *Grid Patrol* from Lothlorien. *Di-Lithium Lift* is slightly more playable, but if you must shoot something, buy *Grid Patrol* instead. **SC**



patrol the bottom of the screen.

As the game progresses you also have to keep an eye out for sharks who will attack your airline, and mines which rise up from the sea-bed at the end of long chains and block your progress.

As soon as you play *Glug Glug* you notice the resemblance with Ultimate's *Jet Pac*. There isn't a lot of difference between finding three pieces of treasure and collecting three stages for your rocket. There are also similarities between the two games' graphics and sound.

Glug Glug can be played by one or two players. It's made more enjoyable by a good choice of control keys, and it doesn't take long to get the hang of the game and start notching up some high scores.

CRL have produced a very playable game. The only possible objection could be that it is almost too playable and doesn't present enough of a challenge, but it's good fun and the later screens should get even the most hardened gamesters into deep water. **SC**

GRAPHICS	8
SOUND	5
ORIGINALITY	6
LASTING INTEREST	7
OVERALL	7

MAKE A DATE TO GET UP TO DATE ON THE MICRO

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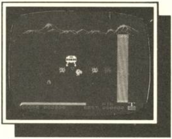
GAME: TRIBBLE TRUBBLE
MACHINE: SPECTRUM 48K
CONTROL: KEYS, KEMP
FROM: SOFTWARE PROJECTS, £5.95

Strange that Software Projects should give this game the name of an existing Commodore 64 game reviewed in this issue. The two games are completely different.

This one has a delightfully original feature in that you have no direct keyboard control over the tribbles you are trying to protect. Instead you control a cheerful, hippopotamus-like creature called Brian Skywalker whom a tribble will follow, but only when the two are close to each other.

So you ease along gently with tribble in tow, only to see it suddenly dash off in the wrong direction because you moved a little too fast. You'll soon develop strong maternal instincts and start to feel positively guilty when one of your tribbles perishes.



And perish they do, because there are five different deadly hazards you and it must go through. Completing one takes you on to the next.

In stage 1 you have to collect rocks and throw them into a waterfall to build a bridge, across which you and your tribble can escape. But the crazy tribble refuses to stay in the safety of the spacecraft while you do this. It insists on leaping out and wandering around the screen. You must immediately shepherd it back again to prevent it falling into the waterfall or coming into contact with nasty red tribble-eating firebugs.

Stage 2 requires ultra-sensitive control as you guide the tribble toward little round goofers which he devours, while avoiding cacti which devour him.

Stages 3 and 4 offer two more different tasks, while in stage 5 you have to shepherd half-a-dozen escaped tribbles through the narrow entrance of their pen before your air supply runs out.

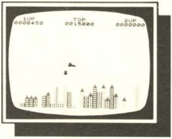
The game doesn't offer spectacular pictures or stunning sound effects. Just an enjoyable and original five-part challenge. And, of course, you will have the satisfaction of placing the tribble kingdom eternally in your debt. **CA**

GRAPHICS	6
SOUND	5
ORIGINALITY	8
LASTING INTEREST	8
OVERALL	7

GAME: MISSION OMEGA
MACHINE: SPECTRUM 48K
CONTROL: KEYS
FROM: PULSONIC, £2.99

Remember the game *City Bomber*? The one where you have to destroy the buildings by dropping bombs one at a time. Well, *Mission Omega* is a version of this.

OK, so there are fuel dumps on top of some of the buildings. You can fire missiles in the direction you are moving. And there are also meteors and enemy aircraft in the air. Even with all this added no more excitement or lasting interest is offered than in the original game.



You have only two control keys, one to fire the missiles and one to drop the bomb. Your height decreases as you move across the screen taking you nearer and nearer to the top of the buildings.

It is possible to change the difficulty of the game. You can change the speed (or is it the jerkiness?) at which you move, the height of the buildings, and how many enemy aircraft appear.

The only good things offered by *Mission Omega* are a bright and colourful picture and a low price tag. **SNC**

GRAPHICS	4
SOUND	3
ORIGINALITY	2
LASTING INTEREST	3
OVERALL	4

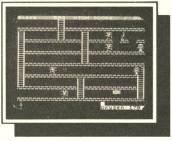
GAME: MUMMY MUMMY
MACHINE: SPECTRUM 48K
CONTROL: KEYS, SINC, CRSR
FROM: LOTHLORIEN, £5.95

In this one you get the chance to become an Egyptian mummy. You have spent peaceful millennia in your pyramid until the ghost of Mad Clive disturbs your sleep.

To get back to sleep you must find the 25 magic scrolls which explain the ritual for your reburial. Just to make things difficult you are hindered by Badorgs, Zobs, Dibrachs and of course the ghost of Mad Clive.

There are three levels of play to *Mummy Mummy*. You start your escapade at the top of your pyramid, the monsters a few levels below you. You must dig a hole, lower a ladder, climb down and entice a monster to chase you.

Before the monster reaches you, you must dig another hole and bury it in the masonry as it falls through.



Yes you're right, it is just a variation on the tried and tested theme of *Space Panic*. Unfortunately it isn't that good. The monsters don't seem to want to follow you, and when they do you'll have a hard time filling the holes in.

Once through the first stage you find yourself inside the pyramid. In this level the ladders are already in place and you cannot place any more. Down at the bottom of the screen is a scroll which must be read before you can bury any more monsters. Once all the monsters have become part of the pyramid you will be whisked away to a new screen. You must read at least five scrolls before the door to your sarcophagus is revealed.

Once you get into your tomb you must collect the remaining 20 scrolls. Nasties in this room are unburiable and you must avoid them or be killed.

Mummy Mummy offers nothing really special. Graphics and sound are only average – your man does 'walk', but the rest of the characters simply jump around the screen spoiling the overall effect.

The average games player will also probably find it too difficult. **SNC**

GRAPHICS	5
SOUND	5
ORIGINALITY	4
LASTING INTEREST	5
OVERALL	5

GAME: VIC CRICKET
MACHINE: VIC 20 + 16K
CONTROL: KEYS
FROM: SOPHISTICATED GAMES, £5.99

Essentially a game for two or more players, I found *Vic Cricket* to be a sound tactical game.

The program is in Basic and simulates a real cricket match quite well. You have a varied choice of formats ranging from limited over to full test matches complete with a save-to-tape facility or a 'freeze game' (while you feed the cat) option.

The lack of a graphical display might put some people off but I'm sure you would rather have a game that played well rather than one that sacrificed tactical quality for a bit of movement and sound.

Tactical plays are numerous, ranging from (in the batting sector) slashing at the ball like Ian Botham or ambling along in Chris Tavare fashion. Fielding and bowling are other areas where tactics play a major part: bowling can be fast, medium or slow and fielding can range from defensive to attacking.

Some of the other likeable features were the constant weather reports and updates on the state of the wicket (which is always from the batsman's

GAME: LEAGUE
MACHINE: VIC 20 + 16K
CONTROL: KEYS
FROM: SOPHISTICATED, £5.99

United nil Spurs nil, 87 minutes gone, the game drifting towards a draw, then suddenly the crowd erupts as Robson slots it home to put United ahead ... Now you can have exciting soccer action on your Vic 20.

You get two games with this tape: a short version (which has *no* games sound) and a long version which I found to be much better. Upon loading the game you are faced with a neat little title screen which you soon get tired of due to the length of this program.

When finally the tape counter grinds to a halt (a quick burst of 'When The Saints Go Marching In' would have been nice here) you are asked whether you have a printer connected or not, and given the option of loading a saved game. It then goes on to ask you to 'define league' – you can enter up to 22 teams.

Something that annoyed me was you could only have five letters to make the name. Anyway, after wiping away the tears and inputting my teams I got into the game.

Features include a running commen-

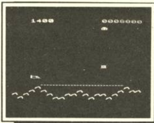
GAME: LUPIN
MACHINE: VIC 20 + 8K
CONTROL: JOYSTICK, KEYS
FROM: ENIGMA, £5.50

Our hero Lupin has to find his way through the castle of the evil Count Von Vic, to rescue his girlfriend and retrieve her stolen gems. The Count is determined to stop him and puts robot guards in each of the chambers containing jewellery. The greater the value of the jewellery, the greater the contingent of guards. Further hazards include patrol cars and guard dogs which must be negotiated both on the way to the chamber and on returning.

The jewellery is given greater priority than the girlfriend (libbers take note) and all five gold ingots must be retrieved before Lupin's loved one can be saved.

Should this chauvinistic task be undertaken successfully then you start over with a greater number of robots, dogs and patrol cars. If Lupin's caught by one of the robots or dogs then one of your three lives is lost and you start over. Contact with the patrol cars is just as lethal, with a loss of life and a game restart being imposed.

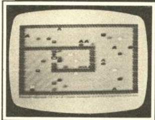
The graphics are adequate but jerky and sound consists of what appears to be a famous 10 CC record (out of tune!).



GAME: ANNIHALATOR
MACHINE: VIC 20 UNEXPANDED
CONTROL: JOYSTICK
FROM: RABBIT, £5.95

In this *Defender*-type game you must fly your craft over a planet and destroy the hordes of invading aliens. The scrolling planet backdrop is rather garish and the attacking aliens move too jerkily to be encountered with any real degree of proficiency. Sound is bearable but can't be called exciting. **TT**

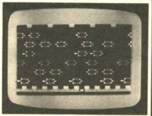
GRAPHICS	5
SOUND	5
ORIGINALITY	4
LASTING INTEREST	4
OVERALL	4



GAME: BOB'S BLUNDER
MACHINE: VIC 20 UNEXPANDED
CONTROL: KEYS
FROM: PULSONIC, £2.99

Bob's blunder is Pulsonic's mistake. Dreadful graphics as Bob the Electrician tries to avoid the ghouls and mend the fuse. This is a Basic program and an even less sophisticated game. The player just hopes for a million volts to end the agony. Pulsonic have got their wires badly crossed with this one. **PC**

GRAPHICS	1
SOUND	1
ORIGINALITY	2
LASTING INTEREST	0
OVERALL	½



GAME: POLLYWOG
MACHINE: VIC 20 UNEXPANDED
CONTROL: JOYSTICK
FROM: MOGUL, £6.95

Pollywog is yet another version of the not so evergreen *Frogger*. Unfortunately it is written in Basic, and is excruciatingly slow and proves very difficult to control, let alone play.

The graphics are plain and lack-lustre whilst sound comprises paltry clicks and dull tones. Not at all the best offering from Mogul Software. **TT**

GRAPHICS	4
SOUND	4
ORIGINALITY	3
LASTING INTEREST	4
OVERALL	4

point of view).

Speed usually isn't something which comes into cricket but in this game pressing 'F5' a few times speeds things up quite considerably (good for confusing Grandad!). To slow things down again press 'F6'.

If you like cricket, don't mind a bit of brain throbbing as you wade through the accompanying *48 page* booklet and you have someone to play against, then this is the game for you.

However if your scene is fast-moving graphics with plenty of sound then steer well clear. **JJA**

GRAPHICS	NONE
SOUND	NONE
ORIGINALITY	6
LASTING INTEREST	5
OVERALL	5

tary, roaring crowds and incident reports such as 'Hit the bar' and 'Claim for penalty'.

The sound was poor to say the least but I found that after a few minutes I could tell what was happening by the roar of the crowd.

That well-used computer freak's armchair could tremble with excitement as you live out your footballing fantasies.

All in all I liked the game very much, if only because it's a change from humdrum zap-'em-ups, or boring old text adventures. **JJA**

GRAPHICS	NONE
SOUND	3
ORIGINALITY	5
LASTING INTEREST	6
OVERALL	6

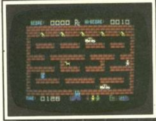
LEAGUE SOCCER
99 END FOR TODAY

Lupin can be played using either keyboard or joystick each giving a good positive response.

Overall, the presentation, playability and concept of this game place it in the midfield of the currently dwindling Vic 20 games market.

It is not the finest game ever to have been written for the Vic and its sexist overtones may even give offence to some players. But it is a worthwhile distraction for the more dedicated arcaders. I wish, though, that someone could explain why the hero is named after a flower. **TT**

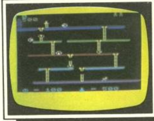
GRAPHICS	6
SOUND	6
ORIGINALITY	4
LASTING INTEREST	6
OVERALL	6



GAME: KONGO KONG
MACHINE: VIC 20 UNEXPANDED
CONTROL: JOYSTICK
FROM: MOGUL, £6.95

As *Kongs* go this is terribly crude in appearance, due no doubt to being fitted into the Vic's standard 3.5K. Strangely enough it's quite playable and if more screens had been possible then it would have been one of the better games for the unexpanded machine. Still, it's nothing for Mogul to beat their chests about. **TT**

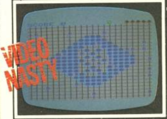
GRAPHICS	2
SOUND	3
ORIGINALITY	4
LASTING INTEREST	4
OVERALL	4



GAME: SNOWSTORM
MACHINE: VIC 20 UNEXPANDED
CONTROL: KEYS
FROM: PULSONIC, £2.99

This program is likely to raise your temperature with excitement. Knock out the blue blobs on the grid while avoiding the snowballs as they increase in number and speed. A very Basic game in which purple asterisks represent the snow. 'Do you want another game?' the program asks. Probably not. It's a load of old snowballs. **PC**

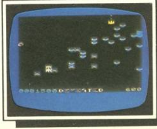
GRAPHICS	0
SOUND	1
ORIGINALITY	2
LASTING INTEREST	1
OVERALL	1



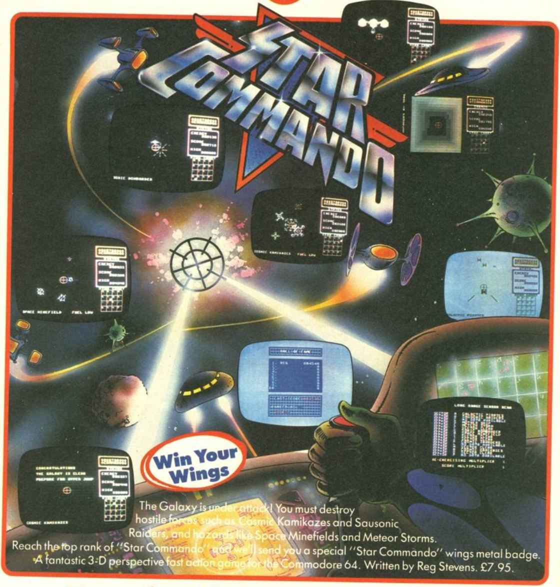
GAME: METAMORPHOSIS
MACHINE: VIC 20 UNEXPANDED
CONTROL: JOYSTICK
FROM: MOGUL, £7.95

In *Metamorphosis* you find yourself poised very precariously in a nest of Cyglorx (your guess is as good as mine!). Your aim is to destroy the tanks and Cyglorx eggs, which threaten to hatch out at any minute. The tanks and Cyglorx will attempt to enclose and destroy you so reflex movement and rapid fire are essential to survive. **TT**

GRAPHICS	7
SOUND	6
ORIGINALITY	5
LASTING INTEREST	6
OVERALL	6



TERMINAL SOFTWARE



The Galaxy is under attack! You must destroy hostile forces such as Cosmic Kamikazes and Sausonic Raiders, and hazards like Space Minefields and Meteor Storms.
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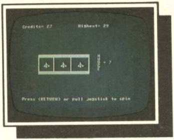
IC 20 • GENIE • VIC 20 • GENIE

GAME: FRUITEE NUDGE
MACHINE: COLOUR GENIE
CONTROL: KEYS, JOYSTICK
FROM: GUMBOOT, £6.35



Credits= 27 Highest= 29

Press <RETURN> or pull joystick to spin

GRAPHICS	3
SOUND	5
ORIGINALITY	1
LASTING INTEREST	2
OVERALL	1

A one-armed bandit leering at you from your TV screen. Isn't that just what you always wanted?

I know software for the Genie is hard to find, but this Basic program is better off lost. Gumboot Software haven't even tried to prevent you LISTing the program, but then I expect they don't think there's anything there to interest anyone. They're right.

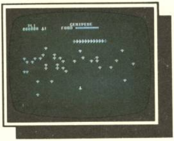
First let's say what's good about the game. It lets you enter your name so that high scores can be identified. It also lets you save high scores to tape. There are some pleasant musical effects.

Now the bad news. Some of the graphics that appear on the wheels are pretty odd, with the emphasis on odd rather than pretty. There is no information within the program on the values of the winning combinations (or even what the winning combinations are) so you have to go back to the instructions.

When you're offered the chance to 'nudge', you don't really know which reel would be most likely to give you a high win because only one symbol is visible on each reel at a time. And of course, even if you do get a high win, you're not going to get any money, are you? No, Algernon, there aren't lots of little 10p bits inside your Colour Genie – you got rid of them when you bought the machine.

You start with 29 units of pocket money. When I finished playing I had 47 units. For the first time in my life I didn't get a kick out of coming out on top. **SC**

GAME: GENIEPEDE
MACHINE: COLOUR GENIE
CONTROL: KEYS
FROM: IPSWICH SOFTWARE, £8.00



GRAPHICS	6
SOUND	6
ORIGINALITY	1
LASTING INTEREST	8
OVERALL	7

If you're a Colour Genie owner then this is your chance to get out into the garden with a gun.

Just in case you've been asleep these last few years, I should explain that *Genipede* is a version of *Centipede*, a game in which you do nothing except shoot everything in sight.

Lined up above your laser base at the bottom of the screen are rows of mushrooms. A segmented Geniepede enters the display from the top and makes its way downwards, dodging round the fungi.

Moving your laser left and right and (to a small extent) up and down, you blast away at the descending bug, splitting it into sections that continue downwards until they are either hit (whereupon they turn into mushrooms) or escape from the bottom of the screen to reappear again at the top.

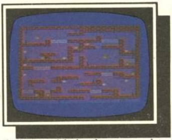
You carry on firing at whatever comes into view, including spiders, descending bugs, and snails – oh yes, and the mushrooms as well if there's nothing else about. You have three lives to start with and you lose one each time you collide with a garden pest.

The snails leave a trail of mutant mushrooms behind them. If the centipede bumps into one it divebombs down to the bottom of the screen. Otherwise there are no surprises for those familiar with the game.

My only reservation about this version is that you get a bonus life every ten thousand points. I'm not the world's greatest centipede killer, but I found myself knocking up lives faster than I was losing them. You don't need to be a wizard at maths to realise that at that rate the game was going to go on forever.

Centipede's a bit old-hat these days, but with Genie games so thin on the ground this has to be recommended. **SC**

GAME: COUNTDOWN
MACHINE: VIC 20 + 8/16K
CONTROL: JOYSTICK, KEYS
FROM: PARAMOUNT, £5.50



GRAPHICS	5
SOUND	6
ORIGINALITY	4
LASTING INTEREST	3
OVERALL	4

This is one of those games which cast the player in the role of saviour of humanity. If you don't like people you probably won't be able to enter into the spirit of the thing.

The problem is this bomb which some loony scientist has planted in the sewers beneath the city. Now he's holding the government to an unspecified ransom. Naturally, your task is to defuse this explosive device. But at the moment you are imprisoned in the crazy boffin's house. To get to the bomb you have to escape from the house, fight your way through the jungle and get down to the bottom of the slimy sewers.

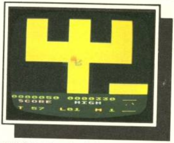
First screen is the house, a red-brick maze on a pink background. Starting in the bottom right-hand corner you have to work your way to the exit at the top. You must pick up keys to get through the gates and try to avoid the various electrified security devices. On the way you can also collect treasure for bonus points, although this seems a trifle distracting when the lives of so many people are at stake.

The next stage is the jungle, represented by four big red trees. Dangers here are falling purple coconuts and man-eating plants. To get the necessary key you shin up the squiggly green ropes to the tree tops.

The final screen is the sewers, built in deep blue brick. Here the only obstacles are poisonous green tendrils. Avoiding these you collect four keys and duly go on to save the human race.

The graphics in this game are colourful enough, but are much too fuzzy to be of great interest. Sound is quite good with suitably loud and shocking electrical noises. The real problem is that the game is just far too easy. **PC**

GAME: SILICON
MACHINE: ATARI
CONTROL: JOYSTICK
FROM: ROMIK, £9.99



GRAPHICS	7
SOUND	7
ORIGINALITY	6
LASTING INTEREST	6
OVERALL	6

This is a very neat reworking of the old *Pac-Man* theme. The maze is a marvellous scrolling gold on black circuit board. Your man, Mad, has to be guided around the circuit (much like the road-race games). The aim is to clear the board of all the stray geometric bits scattered randomly around the maze.

These 'bits' are geometric shapes pulsating with colour. Only four bits can be picked up at any one time, then Mad has to be guided to the top right-hand corner of the display to output these bits. Once done, the hunt for more bits goes on. When all the bits have been collected from one chip/maze, a new one is generated.

The board is, of course, infested with nasty bugs. Mad has a laser which transforms bugs back into more or less harmless eggs. These still cost you a life if you bang into them, but at least they are stationary. The maze is three times the width of Mad, but he keeps to the central lane.

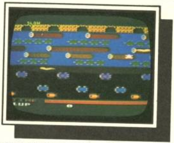
Bugs hug the walls of the maze for the most part, but they cross over into the central lane when you least expect it. You can only hit the bugs when they are directly in line with you in the central lane.

Since you can't see the whole printed circuit board (only a portion of it is on the screen at any one time), the game designers have thoughtfully included a radar which shows the location of Mad relative to the bugs.

There is also the fiery Glitch which appears after a random time interval. This has to be hunted down and shot or, after some predetermined time period, it explodes, destroying the chip. When it appears, a heartbeat starts to sound. This speeds up as the time for the explosion draws nearer.

There are 12 skill levels and the graphics and sound throughout the game are very good.
TH

GAME: FROGGER
MACHINE: ATARI
CONTROL: JOYSTICK
FROM: PARKER, £29.95



GRAPHICS	8
SOUND	7
ORIGINALITY	1
LASTING INTEREST	5
OVERALL	6

At last a superb cartridge version of *Frogger* for the Atari. This is the genuine item, the real *Frogger*, complete with that maddening theme tune.

The graphics are as good as you would expect and the packaging on this game sets a standard for the industry. *Frogger* comes with a 14-page manual, complete with colour screen shots. The instructions are repeated in French, German, English, Spanish and several other languages – the game is clearly destined to take the continent by storm, if it hasn't already.

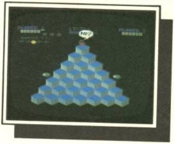
Despite its 14 pages, the manual doesn't have much in the way of tips for novice *Frogger* hoppers. There are just the usual warnings not to try hopping home if the alligator head is showing out of that particular hole.

Once nice feature that some *Frogger* imitators omit is a 'fast/slow' option. Those with ageing reflexes will appreciate being able to work at something less than lightning speed.

Crossing the road is less of a problem than it is on some versions. The pace of the traffic, even on the fast version, is sedate. It's easy to hop your frog from side to side dodging the trucks and cars while looking for a vertical gap. The tricky bit, as always, is the river. The turtles tend to dive from time to time, with fatal results if you don't get hopping.

Once all five frogs are home, the pace hots up (even in 'slow' mode). Snakes appear on the sidewalks and logs and life gets very hectic.
TH

GAME: Q*BERT
MACHINE: ATARI
CONTROL: JOYSTICK
FROM: PARKER, £34.50



GRAPHICS	8
SOUND	5
ORIGINALITY	6
LASTING INTEREST	7
OVERALL	5

This is the cartridge-based pyramid hopping game that has built up a large following. As with *Frogger*, reviewed on this page, the game is superbly packaged. There are no coloured screen shots in the manual, but you can read the instructions in six different European languages, including English.

*Q*bert* is a game that I find impossible to play, though adepts seem to have no difficulty. The aim is to bounce Q*bert, your engaging hero, down the 3D pyramid of cubes, colouring each cube as Q*bert hits them.

This would be difficult enough in its own right since Q*bert can be made to leap off the sides or bottom of the pyramid very easily. Jumping off into space is, of course, fatal.

The problem is that joystick control is a little sticky. It is all too easy to leap diagonally left when you meant to leap diagonally right, or down, or up or whatever.

To make a difficult task impossible, there are a number of bouncing 'things' which bound about the pyramid, threatening to snuff out Q*bert. These include the red and purple balls Coily and Ugg.

A pair of flying discs, one at either side of the screen, will carry Q*bert back to the top of the pyramid and out of the way of the villains. Leaping onto a disk is the only way to get rid of Coily, since he follows and falls to his doom. A nice touch, if a bit repetitive, is the cartoon voice bubble that Q*bert gives off whenever he is caught.
TH

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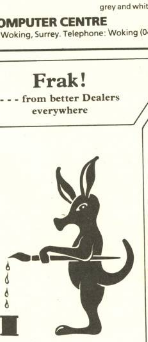

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GAME: CHECKOUT
MACHINE: BBC MODEL B
CONTROL: KEYS, JOYSTICK
FROM: VIRGIN, £7.95

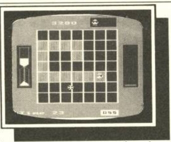
Aaaaagh!! Take this game away from me! I can't stand it any longer!

This is one of those maddeningly simple games that has you staring glassy-eyed at the screen for hours on end. Don't buy it if you value your sanity.

Checkout is very similar to Arcade Software's *Demon Decorator*. The aim of the game is to colour in the squares on the screen by walking over them.

Once you've coloured in all the squares you move on to the next screen and do the same thing all over again. In *Checkout*, however, you must cross each square twice before it registers the desired colour.

This is where the strategy comes in, because if you cross a square three times then it changes back to its original colour.



Arcade had an octopus patrolling their screen – Virgin have gone for a robot, which moves about at random and occasionally gives a blast on its lasers that cost you a life if you happen to be in the way.

GRAPHICS	5
SOUND	3
ORIGINALITY	3
LASTING INTEREST	7
OVERALL	6

My only grouse with the game is with the robot. It isn't intelligent, and never patrols the squares at the edge of the screen. However it does move quite fast, and you have to be reasonably careful when you venture out into the middle of the grid.

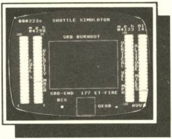
If you enjoy simple, compulsive games, then either *Demon Decorator* or *Checkout* will give you a good run for your money. *Checkout* has better graphics and more features, but Arcade's octopus has brains as well as brawn. You end up in the madhouse whichever one you choose. **SC**

GAME: SHUTTLE PILOT
MACHINE: BBC
CONTROL: JOYSTICK, KEYS
FROM: OAKLEAF, £9.95

Flight simulators are a dime a dozen these days, so you really need a gimmick. In this case the difference is that you are piloting the NASA Space Shuttle rather than an ordinary plane.

Sadly, this doesn't make it a very interesting program. Your mission is in four stages: take off, satellite attack, satellite recovery and, finally, landing.

In none of these parts is there any great attraction for the potential astronaut. Once you have figured out what to do – which takes some time since the instructions are less than exhaustive – it is all too easy.



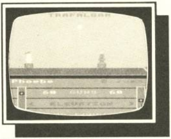
GRAPHICS	4
SOUND	3
ORIGINALITY	5
LASTING INTEREST	2
OVERALL	3

The graphics don't compensate for this lack of interest. The screen displays the usual viewing window and instruments and you're offered a choice of background colours. Black and white seems to be clearest. The sound too is nothing worth travelling to deep space for. Microdeal's *Space Shuttle* is a better buy. **PC**

GAME: TRAFALGAR
MACHINE: ELECTRON
CONTROL: JOYSTICK, KEYS
FROM: SQUIRREL SOFTWARE, £8.00

Squirrel Software seem to have a thing about flying balls. First it was golf balls, in *Supergolf* – now it's cannonballs in *Trafalgar*.

This isn't as irrelevant a remark as it might seem. The programs have a lot in common. In *Supergolf* you had to choose your club carefully in order to land your ball in the hole. In *Trafalgar* you must judge the elevation of your guns carefully to hit your opponent's magazine and blow him up.



Trafalgar is a two-player game, but you can play against the computer if you want to. First side to sink all the other side's ships wins.

GRAPHICS	5
SOUND	2
ORIGINALITY	4
LASTING INTEREST	5
OVERALL	4

Despite the pretty graphics that flash on to the screen whenever two ships enter into combat, *Trafalgar* is a rather unimpressive game. There is little scope for strategy, and once you've grown tired of calculating trajectories you might as well eject the tape. **SC**

GAME: BUMBLE BEE
MACHINE: BBC
CONTROL: JOYSTICK, KEYS
FROM: PROGRAM POWER, £7.95

This a colourful version of the arcade game in which you guide a creature around a maze with revolving doors, trying to eat some things while avoiding others.

In this case the creature purports to be a bumble bee. It's the first blue bee I've ever seen.

Your nimble bumble wants to eat the pollen grains which are scattered throughout the maze. He must make sure though that he doesn't get tempted by the luscious toadstools. These have very pretty red and white spotted tops but are unfortunately poisonous. The 'bowls of gorgeous food' are also likely to make him terminally ill.

Definitely edible, though, are the succulent fruits which appear as bonuses in the centre of the maze; tender plums, sweet strawberries and tropical bananas. Get to them quickly or they turn into whirling purple spiders and career after you. Using the doors as protection you must eat all the pollen grains before rushing to the transporter and moving on to the next page. **PC**

GRAPHICS	7
SOUND	5
ORIGINALITY	2
LASTING INTEREST	7
OVERALL	6

WHAT? MICROPOWER RELEASING COMMODORE 64 SOFTWARE? FANTASTIC!!

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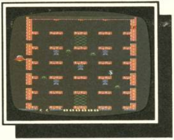
GAME: JET POWER JACK
MACHINE: BBC MODEL B
CONTROL: KEYS, JOYSTICK
FROM: PROGRAM POWER, £7.95



There are five screens to *Jet Power Jack*, and he is faced with the same task in each one. Using his jet-pack to thrust him into the air he must cross the screen to collect fuel pods, and then return to where his flying saucer is waiting for a top-up.

Jack starts off in the top left-hand corner, and in the first screen he has to hop from platform to platform. Spikes protrude from the ceiling in some places, and evil aliens hang like bats above his head.

The real challenge in *Jet Power Jack* is mid-air control. Moving left and right is no problem, but maintaining the correct altitude using the thrust key is very difficult. This makes the second screen, where there are large amounts of open space to be crossed, very challenging. In the third screen, aliens glower at you from cages that are fatal to touch and in the fourth screen spiders hanging from the ceiling block your path.

Throughout each stage various nasties continue to bob up and down at various parts of the screen, and their flight-paths become steadily less predictable as the game progresses.

The final screen features a huge alien squatting at the bottom of the screen, and more open space to be carefully negotiated.

Until now, BBC owners have been left out of the fun given by Ultimate-style games. While this one is no *Lunar Jetman*, it could help to fill a gap in the market.

Apart from an annoying screen black-out after you lose one of your three lives, *Jet Power Jack* is well-presented with reasonable graphics. The sound is loud but can be turned off and there is a pause control so you can answer the phone. Don't expect a high score without a lot of practice. **SC**

GRAPHICS	7
SOUND	5
ORIGINALITY	5
LASTING INTEREST	7
OVERALL	7

★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★

GAME: SWORDMASTER
MACHINE: BBC ELECTRON
CONTROL: JOYSTICK, KEYS
FROM: ACORN USER, £7.95 CASS, £10.95 DISK

In a secluded valley in the depths of Burgundy two warriors, members of the Deutscritter Order of Teutonic Knights, don their armour and unsheath their swords as they prepare to settle their differences in combat.

That's the basic scenario of this very entertaining two-player game, in which steel rings on steel and terrible wounds are inflicted.

The medieval humbug includes a list of rules for Teutonic Knights. They must refrain, for instance, from 'taking to women', which seems a bit harsh to me. Perhaps that's why they're always going out for duels.

After a stirring rendition of Elgar's Enigma Variations the screen display appears: a black valley between two red hills, with a deep blue sky and yellow sun in the background.

The two duelling knights start at either side of the screen in the foreground. On each of the overlooking hills stands another knight with a raised sword which falls lower as the combatant's strength is sapped.

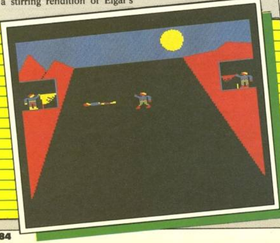
The players control their men using four keys plus the shift lock or copy keys for movement. Swords can be lowered or raised by using the same keys without shift lock or control.

The fun of the game is in pursuing your opponent up and down, forward and back in an attempt to force him to fight. When you do catch up it's mayhem all the way as swords rip through armour or slice through limbs; it really makes you squirm.

The sound when the knights are fighting is a very authentic steely clanking, and the way that they stagger back as swords clash is very impressive.

Swordmaster is an immensely entertaining game with excellent graphics and animation. Keyboard combat will engross all but the most pacifist of players. The only real drawback is that the screen display never changes, which could lead to you experiencing a certain amount of déjà vu. **PC**

GRAPHICS	8
SOUND	7
ORIGINALITY	10
LASTING INTEREST	7
OVERALL	8



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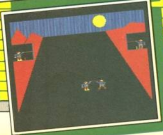
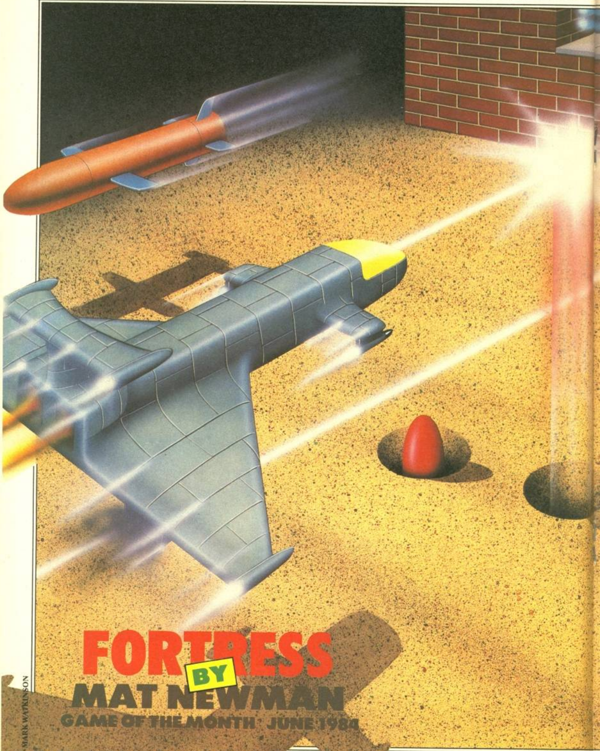




FORTRESS

BY MAT NEWMAN

GAME OF THE MONTH JUNE 1984

MARK WATKINSON

ONTH • GAME OF THE MONTH

GAME: FORTRESS
MACHINE: BBC 'B'
CONTROL: KEYS, JOYSTICK
FROM: PACE, £8.95 CASS, £11.95 DISK

So. You think you're an experienced space pilot. You consider yourself to have nerves of steel, laser-sharp reactions and an intricate knowledge of advanced battle techniques. Then it's time you embarked on mission *Fortress*. It's guaranteed to shatter your illusions.

Make no mistake. This is no casual entertainment to be taken on lightly. It's the real thing: a 3D attacking raid of such terrifying realism that, if you're of a nervous disposition, I strongly advise you to stick to space invaders.

Atari owners have already experienced this kind of action in a game called *Zaxxon* which has swept the United States. *Fortress* is loosely based on *Zaxxon*, but it is not identical.

Both games achieve stunning 3D realism in a unique way. Instead of flying left to right as in 2-D games like *Skramble*, or away from you as in most attempted 3D games, your space craft travels diagonally toward the top right-hand corner of the screen.

That at least is the illusion. In fact the position of the craft changes little. But the terrain you fly over is constantly scrolling in the opposite direction.

Your craft, a handsome, delta-winged beast, flies at constant speed, but using two keys you can steer it to the left or right. Two more keys will alter its height above the ground, this being indicated very convincingly by the craft's shadow. As you dive, you move much closer to the shadow, and at the same time your engine-noise changes in pitch.

The effect is superb, but what makes *Fortress* so special is that it combines this 3D realism with hair-raising action.

OK, the scenario isn't original. You're simply trying to get through a barrage of obstacles in order to destroy a nasty four-legged robot. But the pace at which things happen is electrifying.

You begin by flying over deserted terrain, offering you four seconds in which to adjust to the perspective, position your fingers over the controls, and steady your nerves.

A wall looms up. There's a gap at the top. Climb, move starboard and you're through. But already your fuel gauge has plummeted. You must quickly dive and begin taking out the fuel dumps scattered over the terrain.

Skimming the ground, you jab instinctively at the fire button. Two fuel dumps disappear with a satisfying whoosh giving you a few seconds more fuel. But look out! There are booby-trapped missile sites all over the place. Fly over one and you're dead.

Keep an eye open too for the laser

turrets which keep up a constant barrage of fast-moving projectiles. You swing into line with one as soon as it comes into view, unleash a quick burst of fire and rapidly bank away to avoid being hit. Whoosh! You hit it.

Your pulse rate increases as you climb to clear a second wall and then drop to ground level for another fuel dump. Then comes your moment of greatest danger. A huge Concorde-shaped missile is hurtling toward you. You swing left, it follows. You dive, it follows. It's locked on your course!

Your only hope is to wait until one second before you're hit, climb sharply for half a second and then DIVE. The guided missile can't quite respond fast enough. You're clear.

Thirty seconds of terror later another wall appears. You climb to clear it and ... AAAAGH! A force-field has appeared blocking your path. Only a tiny gap is left. You hammer the 'down' control and open fire. There! Your shots are going through the gap. Your height is right. You're through.

In this next phase of the game, fuel dumps are few and far between. Your evil four-legged robot which you must wipe out is approaching. Hit it four times and it's destroyed.

Believe me, my friend, it'll take you many flights before you succeed. And when you do, a new obstacle course awaits you. Succeed at that and the action gets even faster.

There's no doubt about it. *Fortress* is one of the most impressive games available on a home micro. For the BBC owner, it's an exciting buy after several months which have seen few major releases.

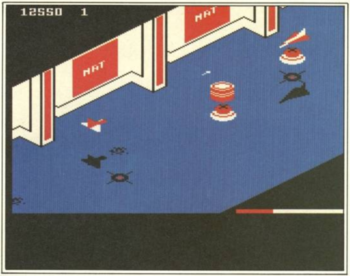
In many respects the feel of the game is even better than that of *Zaxxon.* The scrolling and movement are beautifully smooth, the sound authentic.

One valuable feature is the option of redefining the control keys to those you find most natural. There's also a high-score table and you have the satisfaction of being able to start a new game as soon as the old one is finished – no frustrating pre-game sequences to sit through.

The program uses four-colour high-resolution graphics and takes up every available byte of the BBC's memory. Early versions of the program disagree with some machines and crash after about 20 minute's play. But Pace say they'll put this right.

That bug apart, *Fortress* is an absolutely magnificent piece of programming. Play it if you dare. **CA**

GRAPHICS	10
SOUND	9
ORIGINALITY	3
LASTING INTEREST	8
OVERALL	9



Stardom at sixteen

The 16-year-old programmer of *Fortress*, Mat Newman, isn't as smart as you might think – he agreed to sell the rights to the program outright without retaining any sales-based royalties. If the game sells as well as we think it will he could be kicking himself in a few months' time. Still, when you're in the middle of studying for A levels, it's hard to concentrate on business affairs.

Despite the obvious similarity to *Zaxxon*, Mat himself has never played the game. 'It was described to me by a friend,' he told PCG from his home in Amersham, Bucks. 'He drew me a picture and I thought: that looks impressive. I'll try it.'

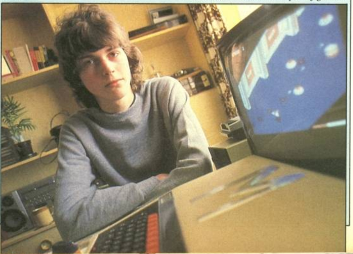
It took him about three months to write, working in the evenings, at weekends and in school holidays.

'It's the best 3D game I've ever seen on the Beeb. My record score is 137,000 – that's going through it five and a half times.'

Apart from *Fortress*, Mat's favourite game is Acornsoft's version of *Defender, Planetoids*. He's had his BBC for 18 months, having been introduced to micros two years ago with a Nascom.

And *Fortress* isn't his first game. He's had two previous releases, including Program Power's *Alien Swirl*. But in the future he's considering a move away from games-programming to produce some business software.

Don't do it, Mat. We'd much rather have some more *Fortress*-quality games.



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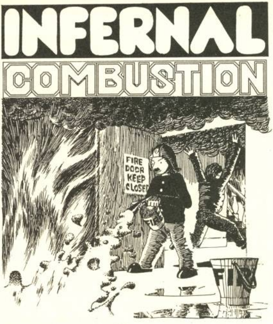

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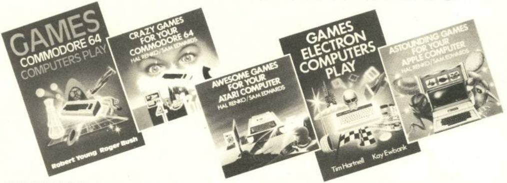
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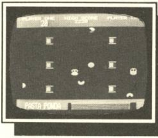
PCG/6

GAME: PASTA BLASTA
MACHINE: ORIC 1/ATMOS
CONTROL: KEYS, P.A.S.E.
FROM: ARCADIA, £5.50



GRAPHICS	8
SOUND	7
ORIGINALITY	7
LASTING INTEREST	6
OVERALL	7

A terrible responsibility rests on your shoulders when you play this game: 'The future of Italian catering depends on you!' If you can imagine a world without spaghetti alla carbonara, crisp pizzas and enormous tutti fruttis, then you won't be bothered. But I was.

The scenario has you, armed only with a sauce squirter, trying to fight off the Ravenous Ravioli Robbers and the Plundering Pasta Pinchers as they attempt to strip you of your ravioli tins (no fresh ingredients here).

The game plays rather like a cross between *Centipede* and *Asteroids*. In the middle of the screen is your squirter – a red container reminiscent of the large plastic tomatoes that used to hold ketchup in Wimpy Bars. At the sides are the six purple ravioli tins you are trying to protect.

You can rotate and accelerate your squirter while firing at the thieving culinary villains. These come principally in the form of Pasta Pinchas, amoeba-like creatures in green, blue and yellow who wriggle on to make off with your tins. It's essential to stop them since when your squirter is squashed a ravioli tin turns into your new weapon.

Vicious Pac-Persons will go for the squirter. Type A is 'mindless' and can be easily killed or avoided, but type B is more intelligent and will make straight for you.

As your Pasta Powder level at the bottom of the screen goes down you have to try and gobble the pill which appears. This can prove tricky, as steering the squirter is not the easiest of tasks.

Pasta Blasta is an enjoyable game with a witty scenario. Graphics are very colourful and the movement is reasonably smooth. The sound is also fun with lots of squelches and splats. **PC**

★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★ PCG HIT ★

GAME: M.A.R.C.
MACHINE: ORIC 1/ATMOS
CONTROL: KEYS
FROM: PSS, £6.95

M.A.R.C. is one of the few original space shoot-outs I've come across.

There are five cities on the moon, each housing two scientists. They're under attack from bombers and heat-seeking bugs. If a city is destroyed the scientists flee into the open and wait to be rescued.

At this point the enemy attempt to carry off the boffins. Bouncing men appear and if they bounce above one of the scientists then they carry him up into space to destruction.

Meanwhile, my friend, you have not been idle. Having landed and refuelled aboard your mothership, you have been in hot pursuit of the opposition, blasting away on your laser.

The action takes place above a 3D landscape, which means that not only must you be at the same height as your opponent, but you must also take depth into account as well. The relative positions of all the battling ships are shown by small shadows that they cast on the ground below.

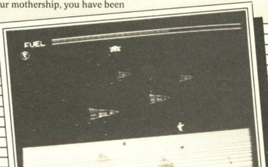
Your immediate concern is to rescue the scientists by lowering a ladder to them, which they scramble up. You must then ferry them to the mothership.

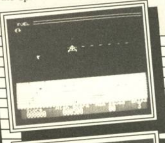
The problem with *M.A.R.C.* is one of control. In order to move you need left, right, in, out, and thrust controls. Unless you keep the thrust handy you'll succumb to gravity and crash.

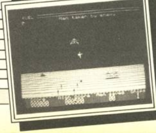
Luckily PSS have given you the option of defining your own keys. The best solution is to define one key as both fire and thrust which means you use a lot of fuel but at least it makes the game playable.

Graphics and sound are both well-handled in this game, which despite scoring rather low on playability remains an exciting challenge for the nimble-fingered. **SC**

GRAPHICS	8
SOUND	7
ORIGINALITY	8
LASTING INTEREST	8
OVERALL	8







DRAGON • CGL • DRAGON • CG

GAME: STEP UP
MACHINE: CGL M5
CONTROL: JOYPAD
FROM: COMPUTER GAMES LTD, £23.95

A good *Kong*-style game. Instead of the gorilla you are faced by little green monsters, creeping mice, bats and spiders. Should you reach the tenth level a friendly UFO will descend and carry you off to the next screen. Well-animated monsters, reasonable sound effects and an enjoyable game. **PC**

GRAPHICS	7
SOUND	5
ORIGINALITY	4
LASTING INTEREST	6
OVERALL	5

GAME: GUTTANG GOTONG
MACHINE: CGL M5
CONTROL: JOYPAD
FROM: COMPUTER GAMES LTD, £23.95

The bizarre title of this game gives you no clue what it is about. So let's read the blurb.

'You are a railroad builder. Lay the tracks to the station, and drive the train

---

GAME: 3D SPACE WARS
MACHINE: DRAGON 32
CONTROL: KEYS, JOYSTICK
FROM: HEWSON CONSULTANTS, £7.95

3D Space Wars is already a successful game on the Spectrum, and now there's a version for Dragon owners. Your mission is to seek out the Seiddabs and bit-blast them.

The display is in black and white but don't let that put you off. Fine detail and realistic 3D effects make up for the lack of colour.

The main area of the screen shows the view through your cockpit, with gunsights dead-centre and the rest of the universe (complete with attacking Seiddabs) wheeling around you.

Also provided on the display are a long-range scanner, speed indicator, score, and number of aliens destroyed. A fuel gauge shows how much time you have left – fuel is used up when you fire and when you're hit by the enemy.

Each attack wave contains 24 aliens, and the opposition gets more aggressive as the game progresses. You have two opportunities to refuel during each wave, but you must find the fuelling station to do so. This isn't easy since it is impossible to distinguish it from other

---

GAME: PEDRO
MACHINE: DRAGON 32
CONTROL: KEYS, JOYSTICK
FROM: IMAGINE, £5.50

In this latest release from Imagine you take on the role of Pedro. The love of Pedro's life is his garden. After many years of hard work and tender loving care Pedro now has the most beautiful garden in Mexico.

Unfortunately for Pedro life isn't just a bed of roses. All of the animals for miles around have acquired a taste for Pedro's plants and are always breaking into the garden to eat them. As if having to control the animals wasn't enough the local tramp keeps trying to steal all of Pedro's seeds.

Pedro does have a few ways in which he can protect his garden. If the tramp turns up Pedro can jump up and down to scare him off. Jumping is also a good way of getting rid of the animals – if you land on top of one you squash it. (Once again we apologise profusely to all animal lovers ...)

In the garden there is also a supply of bricks and compost. Any holes in the garden fence can be filled in with these items to keep the animals at bay (at least for a short while).

GAME: NORTH SEA OIL
MACHINE: DRAGON
CONTROL: KEYS, JOYSTICK
FROM: SHARDS SOFTWARE, £5.75

This is one of those games that tries to give you a taste of the world of big business and the thrill of making your fortune drilling for oil.

There are lots of programs like this on the market for the simple reason that they are easy to write. The player is given a sum of money and a limited number of ways in which to spend it. Success is, or should be, dictated by the common sense of your decisions.

In *North Sea Oil* you have a weekly budget of £1 million. You are allowed to divide this between three accounts – drilling consumables, spares, food, and accommodation for your workforce.

Having made the appropriate allocations you must then navigate your supply ship across the North Sea to the drilling platform. The player must take into account wind and tide when setting a course. The longer the voyage, the more supplies get washed overboard en route.

Once you've arrived safely you're asked to divide your workforce between drilling, maintenance and services. You

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GAME: 3D SEIDDAB ATTACK
MACHINE: DRAGON
CONTROL: KEYS, JOYSTICK
FROM: HEWSON CONSULTANTS, £7.95

Shooting down alien spacecraft which fly towards you in 3D is not exactly original stuff. *Seiddab* however offers pretty good graphics for the Dragon. In fact the explosion is the best I've seen on a home micro.

A game worth having a look at, although some will find it pretty uninteresting. **SNC**

GRAPHICS	6
SOUND	5
ORIGINALITY	4
LASTING INTEREST	4
OVERALL	5

TITLE: SPRITE MAGIC
MACHINE: DRAGON 32
CONTROL: KEYS, JOYSTICK
FROM: KNIGHT SOFTWARE, £17.25

If you mention the Dragon to anyone who 'thinks' they know about computers they will probably laugh at you. Comments such as 'it's got no sprites' or 'the sound is lousy' will probably abound. These facts may be true but the Dragon does have a very good version of Basic with some very powerful graphics facilities.

With *Sprite Magic* Knight Software have tried to put right some of the so-called 'flaws' of the Dragon and have done an excellent job.

Sprite Magic gives the owner of the 32 the ability to have up to 128 sprites, an auto-repeat keyboard, text in all graphics modes, enhanced sound facilities and much, much more.

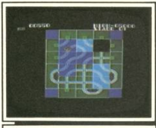
Three new commands are given for sound. AUTOBEEP will output a specified sound if a sprite goes off the edge of the screen or collides with some other object. BEEP has two different forms. With a number between 0 and 15 after it one of *Sprite Magic*'s pre-programmed sound effects is heard. Alternatively, you can put a series of parameters after BEEP which will allow you to devise new sound effects by denoting a rate of change of volume etc.

For anyone who doesn't know, a sprite is a large graphics character that can be placed at any position on the screen, moved about smoothly and controlled if it hits the edge of the screen or another object. With *Sprite Magic* you can enter up to 128 different sprites. ANIMATE allows sprites 0 to 7 to be animated automatically, ie. they will follow a sequence of drawings. This as you go.' Both at the same time? Zany, but true.

The screen is made up of squares over which the track is laid. However, one of the squares is missing. So, to keep your chuff-chuff rolling you have to constantly rearrange the board.

It's not too bad when you've got the track to yourself, but often there are oncoming trains to avoid. These, plus the problem of plotting a route, can make the game exciting, even frenetic. Graphics are adequate rather than impressive, but the sound is pleasant enough with its puffing and whistling noises. **PC**

GRAPHICS	5
SOUND	6
ORIGINALITY	5
LASTING INTEREST	6
OVERALL	5

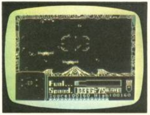


objects on the long-range scanner.

During flight you can adjust your speed to one of eight settings. At the higher speeds you tend to get hit less, but it's also more difficult controlling your ship and getting the Seiddabs in your sights. Speed has no effect on fuel consumption.

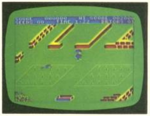
3D Space Wars is definitely one of the better shoot-'em-up games on the Dragon. The sound isn't too bad, and the graphics give a convincing impression of deep-space duelling. A worthwhile romp through the universe for those with time (and Seiddabs) to kill. **SNC**

GRAPHICS	8
SOUND	5
ORIGINALITY	4
LASTING INTEREST	8
OVERALL	7



Pedro's garden is displayed in 3D, and this looks very nice but it does make the game a little difficult to play. You would imagine that moving the joystick up or down the screen would move you straight up the screen, unfortunately this isn't so. Because your view is displayed in 3D Pedro moves at an angle, giving the impression that Pedro is moving into the garden but making it difficult for you to judge where you will end up. Overall a game that looks very promising but unfortunately doesn't live up to expectations as it lacks the playability that would keep you hooked. **SNC**

GRAPHICS	7
SOUND	5
ORIGINALITY	8
LASTING INTEREST	6
OVERALL	6

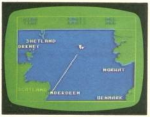


are then permitted to drill a certain number of wells depending on your performance so far. The more wells you drill the more money you'll earn.

Strategy games are usually written in Basic and are not exactly noted for speed and special effects. *North Sea Oil* is no exception. More seriously, the number of options open to the player is seriously limited in Shards' program.

The only thing in favour of this game is the inclusion of the sea-crossing which adds a much-needed touch of originality. Oil tycoons are unlikely to be impressed. **SC**

GRAPHICS	5
SOUND	3
ORIGINALITY	5
LASTING INTEREST	5
OVERALL	4

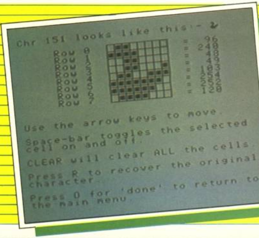


means that you can have a man running across the screen or the blades of a helicopter spinning etc.

Probably the best way to see what a program such as *Sprite Magic* can do is see some examples. Knight Software kindly include six 'free' demonstration programs. Programs range from a maze game to a utility that allows you to redefine the character set. If you really want to know how to use a program like this to its full then read the examples very carefully.

There are many more commands and features to *Sprite Magic* than have been mentioned. Put the power of these new commands together with the existing Basic commands and the Dragon turns into a very powerful machine.

If you would like to write games programs then ignore the expensive price tag of this package – go out and buy it, it's worth every penny. **SNC**



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Chr 151 looks like this - 2
     Row 0            =   96
     Row 1            =  240
     Row 2            =   48
     Row 3            =   49
     Row 4            =  103
     Row 5            =  254
     Row 6            =  252
     Row 7            =  120

Use the arrow keys to move.

Space-bar toggles the selected
cell on and off.

CLEAR will clear ALL the cells.

Press R to recover the original
character.

Press 0 for 'done' to return to
the main menu.
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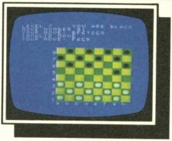
MEMOTECH • MEMOTECH •

GAME: DRAUGHTS
MACHINE: MEMOTECH MTX
CONTROL: KEYS
FROM: CONTINENTAL, £7.95

The last time I played draughts I was roundly beaten by a six-year-old, so I felt far from confident as I settled down to mental combat with this artificially intelligent player. Was it, I wondered, more or less embarrassing to lose to a machine than to a tiny child?

During the first game I found myself thinking that I needn't have worried; I was crushing the thing. Admittedly, it was only on the first of the nine possible levels, but you've got to get your confidence back somehow, haven't you?



As the machine blundered away it was good to see that it was moving very quickly – but so quickly that the human player is sometimes confused as to whose turn it is.

GRAPHICS	5
SOUND	None
ORIGINALITY	5
LASTING INTEREST	5
OVERALL	5

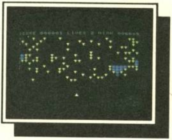
After this magnificent victory I moved up to level four. The program now provided much stiffer opposition and still made its moves reasonably quickly. But even a mediocre player should have little trouble winning.

Screen display in this program is in yellow and green – clear and soothing. One drawback is that the packaging includes no instructions on how to abort a game or restart. But those who like draughts will like *Draughts*. **PC**

GAME: KILOPEDE
MACHINE: MEMOTECH MTX
CONTROL: JOYSTICK, KEYS
FROM: CONTINENTAL, £6.95

There are two essential requirements for any version of *Centipede*; speed and loud noises. *Kilopede* lacks both of these and so does not qualify as one of the more alluring megazaps around.

The game's graphics, though, are tolerable. Yellow mushrooms in the familiar light-bulb style are spread over a black background. Through this vegetation comes the segmented blue Kilopede. Your laser-base is very mobile, but doesn't fire anything like fast enough.

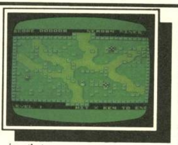


There are, of course, more hazards than a mere centipede. You are told to avoid 'killer crabs, fleas, spiders and jellyfish', though it's hard to tell what relation the green half-moon shaped creature near the beginning bears to any of these.

Overall, the game is merely average and is no better than the many other versions available for other machines. Given the Memotech's specifications we might have expected something considerably more sophisticated. **PC**

GRAPHICS	5
SOUND	5
ORIGINALITY	1
LASTING INTEREST	3
OVERALL	4

GAME: SUPER MINEFIELD
MACHINE: MEMOTECH MTX
CONTROL: JOYSTICK, KEYS
FROM: CONTINENTAL, £6.95



Veterans of World War II could get a pleasant, or nasty, feeling of nostalgia as they play this game. The object is to get from one side of the minefield to the other without, of course, being blown up.

The trouble with mines is that you can't see them. This is because they are usually underground. So what you need is a mine-detector. In this game, though, all your detector, in the corner of the screen, will tell you is the number of mines that are near you.

These could be left or right, up or down. You must, then, use 'logic, skill and deduction' to plot a safe route across the screen. As you move to a mine-free space a white blob appears. Using these markers and the detector you might just get through with all your limbs intact.

The graphics in this program are disappointing; a garish mixture of green and yellow. The sound is also dull with its poor noises for movement and explosion. On higher levels there are nasty spiders on the roads and tanks which re-arrange the mines. But they don't really make it any more exciting. **PC**

GRAPHICS	4
SOUND	3
ORIGINALITY	3
LASTING INTEREST	4
OVERALL	4

GAME: BLOBBO
MACHINE: MEMOTECH MTX
CONTROL: KEYS, JOYSTICK
FROM: CONTINENTAL, £6.95

Don't be deceived by this name; *Blobbo* is a very close relative of *Pac-Man*. In the extremely limited area of maze-games available for the Memotech it stands up as an enjoyable, if not an outstanding, program.

Blobbo is a blue creature with a much sharper nose than his name suggests. His job is to rush around the maze eating the succulent fruit which appears. Bananas, cherries, apples – Blobbo loves them all.

But it's not so easy to satisfy his appetite. The maze is also inhabited by the Blobbo-eaters, monsters whose only desire is to consume our hero. They come in a variety of sickly colours, have twinkling eyes and are topped with far-out frizzy hair-dos.

As in *Pac-Man* there are power-pills in the corners of the maze which enable Blobbo to eat the monsters for a few seconds. There are also deadly skulls and cross-bones.

The graphics in this game are pleasant without being amazing, but the sound it very good. The background tune alternates between fairground-style jauntiness and the rousing strains of what I think is Grieg. **PC**

GRAPHICS	6
SOUND	7
ORIGINALITY	3
LASTING INTEREST	5
OVERALL	5

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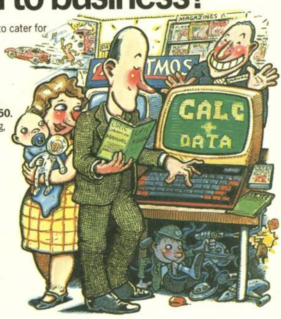
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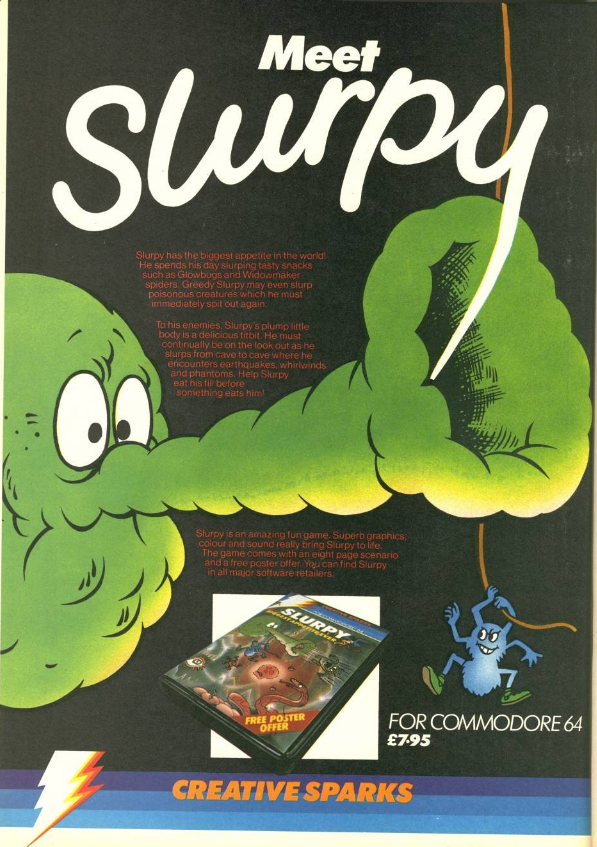
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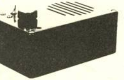

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Chris Anderson presents a second

THE ABC

Let's admit it, last month's game wasn't exactly a PCG hit. But it should have given you some important first ideas about programming. This time you'll be going on to learn two more key ideas: how the computer handles text, and how you can get movement on screen. The aim is to end up with a game called *Letter Invaders* which should run on any of the popular home micros.

It works like this: advancing across the screen is an ever-lengthening line of letters. You destroy them by hitting the same letters on the keyboard. OK, it's not quite *Defender*, but it'll force you to move round your keyboard like greased lightning.

In order to make the game challenging, the attacking letters need to be selected at random. You learnt last time how to generate a random number. But how does the computer generate a random letter?

It can't directly. First you have to get it to select a random number and then convert this to a corresponding letter. This is easier than it sounds because your computer already links each letter of the alphabet with a different number. For example, A is 65, B is 66, C is 67, and so on through to Z which is 90.

This match-up system is internationally agreed and is called the ASCII system. You can make use of the system with this magic sequence of letters: CHR$ (the CHR bit is short for 'character'). If you follow those letters with a number in brackets between 65 and 90, the computer will convert the number to its corresponding letter.

For example try typing in PRINT CHR$(65) followed by <Enter>. The computer should print the letter A.

So in order to produce a random letter, the computer must simply select at random any of the numbers from 65 to 90. You learnt last month how to generate a random number ranging from 0 up to any given number. This needs to be adapted to produce the random numbers we want. This program line does the trick – type it in.

```
10 LET N=65+INT (RND(1)*26)
    [for Dragon and BBC: 10 LET
    N=65+RND(26)]
```

To understand it, work through it from the back. RND(1)*26 generates a random number of anything from 0 to (but not including) 26. These numbers will include decimals, such as 17.4523. But all we want is simple whole numbers such as 17. So we chop off the part after the decimal point by using INT (which stands for integer, a mathematical term meaning whole number).

For example, INT(17.4523)=17. This means that INT(RND(1)*26) will generate any whole number from 0 to 25. Now all we have to do is add 65 to each number that we generate and we'll have achieved our goal. What the line does, then, is to generate a random number from 65 to 90 and label it N. To prove the point, add these two lines.

```
20 PRINT CHR$(N);
30 GOTO10
```

Line 20 converts our numbers to letters, and prints them. (The semicolon at the end of the line stops the computer from moving down to a new line on the screen after printing each letter.) Line 30 causes the computer to return to line 10 and choose another random number.

If you run this program, it should fill the screen with letters chosen at random. It will keep this up for ever unless you stop it, by pressing [Break] or [Stop]. Try it.

Character strings

So, we can generate random letters. But the program we are aiming at needs to be able not just to print them, but to actually move them across the screen.

This means it must have some way of keeping a record of the letters it has generated. You've already seen how it keeps a record of numbers – it labels them with a letter (called a variable).

Well, it's possible to label a string of letters in the same way. The only difference is that the letter which you use as a label must be followed by a dollar sign. This indicates that it's being used as a label for a string of letters, not for a number. Enter and run this short program:

```
1 LET A$="KISSES"
2 LET B$="HUGS AND"
3 LET C$="OX"
4 PRINT B$;A$
5 PRINT C$;C$;C$;C$;C$
9 END
```

Can you see what's happening? In line 1 the computer is instructed to give the label A$ to the string of letters KISSES. There are similar instructions in lines 2 and 3. In lines 4 and 5 the phrases to be printed are simply referred to by their labels. Line 9 stops the computer continuing on into the program you've already entered.

One very clever thing the computer can do is to add together different strings of letters (they're called just 'strings' for short). Change your mini-program by adding these two lines (the existing lines 4 and 5 will be deleted).

```
4 LET D$=B$+A$+" "C$+C$
5 PRINT D$
```

Run this, and you will see that several different strings (including the single-character string " ") have been combined (added together) to form the string D$.

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LETHAL GAMMA BOMBS)
THE ANTI-MATTER SHIELD,
THE BLACK HOLE, AND DIS
PLANET OF KAK. THEN (CONT
ALIEN ATTACK

Moving letters

This technique is about to prove very useful. What we're trying to do is to get an ever-lengthening string of random letters to move across the screen. The technique of adding letters together will allow us to produce an ever-lengthening string. How do we move it?

Well just suppose we produce an ever-increasing string of random letters, and arrange that every time a new letter is added, all the others are printed one position further to the right. This will look as if the letters are advancing across the screen. So ... delete lines 1-9 and add the following to replace the existing lines 20 and 30.

```
8 LET A$=""
20 LET A$=CHR$(N)+A$
30 CLS
    [Vic 20, CBM 64: 30 PRINT "(CLR)"]
40 PRINT A$
50 FOR I=1TO100
60 NEXT I
70 GOTO20
```

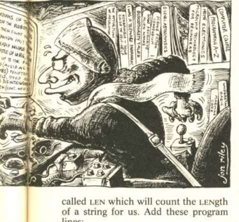
Lines 50 and 60 are there simply to slow down the program a little. Line 70 sets up a loop to ensure that the program repeats itself. Thus A$ starts as nothing in Line 8 and increases by one letter each time the program goes round the loop. Line 30 is crucial because it clears the screen just before each new, longer version of A$ is printed. This ensures that the newest letter always appears in the screen's top left corner.

Run the program and watch the growing line of letters march across the screen. If you leave it running, an error message will eventually be printed because the string has become too long. For our game a maximum length of 20 letters will be plenty, so we should get the program to stop once the string has reached this length.

There's a useful function in Basic

games program for the complete beginner.

OF INVADERS



called LEN which will count the LENgth of a string for us. Add these program lines:

```
25 IF LEN(A$)>20 THEN GOTO80
80 PRINT "YOU ARE DEFEATED"
```

As you can see from line 25, the way to use LEN is to follow it with brackets containing the string to be counted. Every time the computer reaches line 25 it will count the number of letters in A$. The '>' sign means 'is greater than', so the computer checks to see if this number is greater than 20. If so the program jumps to line 80 and comes to an end. The error statement is avoided.

How you take part

OK, our letter invaders are working fine, but we still don't have a game because we can't type in letters to destroy those on screen. The INPUT command won't help either because it actually stops the program.

We need a brand new command, one that will turn out very useful in games. On the Commodore computers it's called GET, and on most other machines INKEY$.

When the computer is given these commands it checks briefly to see if a key has just been pressed on the keyboard. If so it makes use of it as directed in the program.

You have to be careful how you make use of this. What you press on the keyboard while a program is running will register only if the computer reaches a GET or INKEY$ command very soon afterwards. In our game we want to ensure that every key we hit is registered. This means we shall have to arrange that the computer is continually receiving fresh GET or INKEY$ commands as it works through the program.

There's an easy way of doing this making use of the FOR-NEXT statements which so far we've used only as a way of slowing the program down. To understand these statements better, enter and run this short program.

```
1 PRINT "THIS IS PRINTED ONLY ONCE"
2 FOR I=1 TO 10
3 PRINT "THIS IS PRINTED 10 TIMES ";I
4 NEXT I
5 PRINT "THIS TOO IS PRINTED JUST
ONCE"
6 END
```

What the FOR-NEXT statements do is to mark out a section of the program which is to be repeated several times. The exact number of times is contained in the FOR statement. The computer moves repeatedly from the FOR statement to the NEXT, carrying out all the commands it encounters on the way.

Incidentally, the letter contained in the FOR statement (I in this case) is used by the computer to keep count of how many times it has repeated the loop. That is why when you ran the above program, I increased from 1 to 10. If nothing is contained between the FOR and NEXT statements the computer simply shuttles very quickly between the two providing us with a brief pause.

So if we place a GET or INKEY$ command inside a FOR-NEXT loop, the computer will be given the command many times, allowing it to pick up all our keyboard entries.

Splitting strings

What the computer then has to do is to compare the letter we've typed in with that at the end of the string of random letters it has generated. We can get it to look at just the right-hand part of the string by use of the command RIGHT$.

For example RIGHT$(A$,2) will take the two right-most characters of the string A$. While RIGHT$(A$,1) will be just the single character at the right end of the string. Another command LEFT$ allows us to work from the other end of the string in the same way. (The Spectrum, however, uses a single command TO which achieves the same thing. A$(1 TO 3) means the first three characters of A$. And if A$ is 8 characters long, then A$(7 TO 8) means the two right-most).

To see how all this works, delete lines 1 to 6 and enter these instead:

```
52 LET L=LEN(A$)
54 IF L<1 THEN GOTO70
56 LET I$=INKEY$
  [Commodore machines: 56 GET I$]
58   IF   I$=RIGHT$(A$,1)THEN   LET
A$=LEFT$(A$,L-1)
  [On Spectrum: 58 IF I$=A$(L-1 TO
  L) THEN LET A$=A$(1 TO L-1)]
```

We need to refer to the length of A$ several times. So line 52 gets the computer to work this out and label it with the letter L.

In line 56 the computer checks to see if you have just typed a letter. Line 58 will compare your letter with that on the right end of the string A$. If they're the same, that right-most letter is chopped off A$ by use of the phrase LEFT$(A$,L–1). To see this, suppose that A$is 13 characters long. Then LEFT$(A$,L–1) is the same as LEFT$(A$,12) which means the first 12 letters of A$ counting from the left. The 13th letter is chopped.

The purpose of line 54 is simply to check that A$ still has at least one letter in it. Otherwise attempts to chop it further will cause the program to crash!

Keeping score

Our game is nearly complete. All we need do now is to get it to speed up as time goes on, and introduce a score. Add these lines (the existing line 50 will be replaced):

```
5 LET S=0
45 LET S=S+1
50 FOR I=1 TO 100–S
100 PRINT "YOUR SCORE IS ";S
```

The variable S is used for your score. It increases by one, each time a new random letter is generated. But line 50 ensures that as S gets bigger, so the FOR–NEXT loop will repeat fewer times, and the program will therefore speed up.

That's *Letter Invaders* – but there are plenty of ways you could vary it. I wonder what would happen if line 10 was altered to select numbers from 33 to 64...?

LETTER INVADERS – full listing

```
5 LET S=O
10 LET N=65+INT(RND(1)*26)
[BBC, Electron, Dragon: 10
  LETN=65+RND(26)]
20 LET A$=CHR$(N)+A$
25 IFLEN(A$) >20THEN GOTO80
30 CLS
[Vic 20, CBM 64: 30 PRINT "(CLR)"]
40 PRINT A$
45 LET S=S+1
50 FOR I=1 TO 100-S
52 LET L=LEN(A$)
54 IF L=0 THEN GOTO 60
56 LET I$=INKEY$
  [Vic 20, CBM 64: 56 GET I$]
58 IF I$=RIGHT$(A$,1)THEN LET
  A$=LEFT$(A$,L-1)
[Spectrum: 58 IF I$=A$(L-1 TO L)
  THEN LET A$=A$(1 TO L-1) ]
60 NEXT I
70 GOTO10
80 PRINT "YOU ARE DEFEATED"
90 PRINT "Your score is"; S
```

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1.8.83 and 1/11/83.

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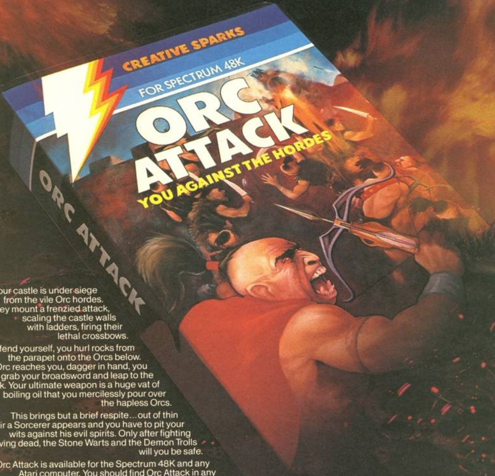
ORC ATTACK - Can you survive...?



Your castle is under siege
from the vile Orc hordes.
They mount a frenzied attack,
scaling the castle walls
with ladders, firing their
lethal crossbows.

To defend yourself, you hurl rocks from the parapet onto the Orcs below. If an Orc reaches you, dagger in hand, you grab your broadsword and leap to the attack. Your ultimate weapon is a huge vat of boiling oil that you mercilessly pour over the hapless Orcs.

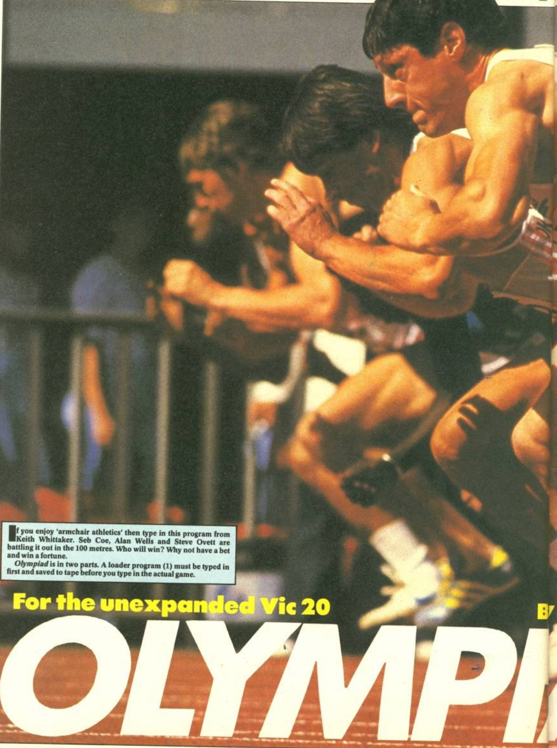
This brings but a brief respite...out of thin air a Sorcerer appears and you have to pit your wits against his evil spirits. Only after fighting the living dead, the Stone Warts and the Demon Trolls will you be safe.

Orc Attack is available for the Spectrum 48K and any Atari computer. You should find Orc Attack in any major software retailer. (And it carries an offer of a free poster of the original oil painting featured on the pack.)

£6·95

FOR SPECTRUM 48K

CREATIVE SPARKS



If you enjoy 'armchair athletics' then type in this program from Keith Whittaker. Seb Coe, Alan Wells and Steve Ovett are battling it out in the 100 metres. Who will win? Why not have a bet and win a fortune.

Olympiad is in two parts. A loader program (1) must be typed in first and saved to tape before you type in the actual game.

For the unexpanded Vic 20

OLYMP

B

All-Sport

VIC 20 • VIC 20 • VIC 20 • VIC 20

By Keith Whittaker

AD

Program 1:
Gives instructions to the user, loads the user-defined graphics and the data for the two tunes.

Program 2:

20 – 155	Takes a bet from the user.
160 – 220	Sets up the screen ready for the race and resets some of the variables.
230 – 350	Race routine.
1000 – 1140	Prints who won and checks if you are out of time or money.
1500 – 1600	Tells the user that the time is up and plays 'I'm in the money'.
2000 – 2130	Out of money routine. Plays the death march.
2500 – 2550	Another Game?
6000 – 6090	Sets up the variables.

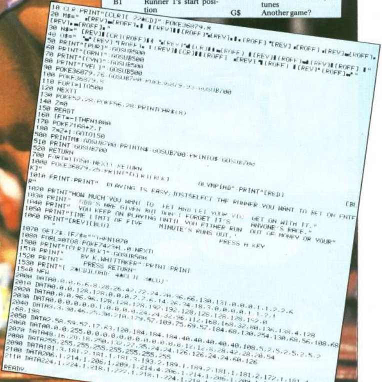
VARIABLES:

Program 1:

M$	Top line of logo
N$	Middle line of logo
O$	Bottom line of logo
T	Holds data for graphics
Z	Holds memory locations for graphics data
Z$	Used in 'press a key' routine
L	Puts a space in graphics memory

Program 2:

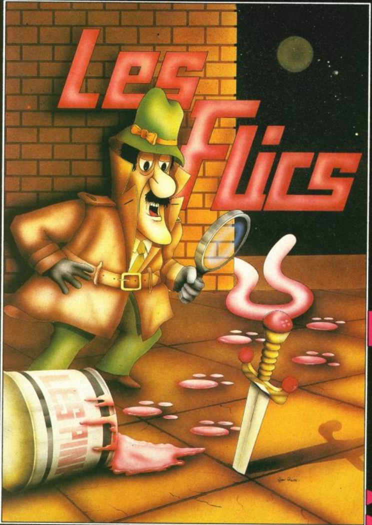
T	Used in time delay
I&H	Used to set up runners' odds
OD(A)	Holds odds for each runner
A$	User's runner selection
n$	Holds name of runner bet on
MO	Money left
P	Used to set up screen layout
D$(0)	Screen position of starter's gunfire
D$(A)	Vertical screen position of each runner
BE	Amount bet on the runner
B1	Runner 1's start position
B2	Runner 2's start position
B3	Runner 3's start position
C(A)	Runners' horizontal screen position
A	Random number to decide who moves next
B	Running position when printing runner
M$(A,B)	Used to print runner
WI	Number of winning runner
S	Amount won
J&M	Used on win and lose routines
N	Notes in tune
D	Length of note
Z	Used as a time delay in tunes
G$	Another game?



```
10 CLR:PRINT"[CLR][ 22*CD]":POKE36879,8
20 M$=" ▪[REV]▬[ROFF]▪▌ ▌[REV]▌▌[ROFF]"▪[REV]▪▌▪[ROFF]"[REV]▪[ROFF]▪[REV]▬[ROFF]▪
[REV]▪▬[ROFF]▪"
30 N$=" [REV]▌[CR][ROFF]▌▌ ▚[REV]"▖[CR]▌▌▬[ROFF] ▌[REV]▌[ROFF]▬[RFV]▌[ROFF] ▌"
40 O$=" ▚"[REV]"[ROFF]▪ ▌[REV]▌[CR]▌▌[ROFF] ▪[REV]▜[ROFF] ▌[REV]"[ROFF]▬"
50 PRINT"[PUR]":GOSUB500
60 PRINT"[GRN]":GOSUB500
70 PRINT"[CYN]":GOSUB500
80 PRINT"[YEL]":GOSUB500
90 POKE36879,76:GOSUB700:POKE36879,93:GOSUB700
100 POKE36879,8
110 FORT=1TO500
120 NEXTT
130 POKE52,28:POKE56,28:PRINTCHR$(8)
140 Z=0
150 READT
160 IFT=-1THEN1000
170 POKE7168+Z,T
180 Z=Z+1:GOTO150
500 PRINTM$:GOSUB700:PRINTN$:GOSUB700:PRINTO$:GOSUB700
510 PRINT:GOSUB700
520 RETURN
700 FORT=1TO50:NEXTT:RETURN
1000 POKE36879,25:PRINT"[CLR][BLK]                    OLYMPIAD":PRINT"[RED]                    [BL
K]"
1010 PRINT:PRINT"  PLAYING IS EASY,JUSTSELECT THE RUNNER YOU WANT TO BET ON ENTE
R"
1020 PRINT"HOW MUCH YOU WANT TO  BET AND LET YOUR VIC  GET ON WITH IT."
1030 PRINT"  ODD'S ARE GIVEN BUT DON'T FORGET IT'S    ANYONE'S RACE."
1040 PRINT"  YOU KEEP ON PLAYING UNTIL YOU EITHER RUN  OUT OF MONEY OR YOUR"
1050 PRINT"TIME LIMIT OF FIVE     MINUTE'S RUNS OUT.'
1060 PRINT"[REV][BLU]                    PRESS A KEY
     "
1070 GETZ$:IFZ$=""THEN1070
1080 FORL=0TO8:POKE7423+L,0:NEXTL
1500 PRINT"[CLR][BLK]":GOSUB500
1510 PRINT"     BY K.WHITTAKER":PRINT:PRINT
1520 PRINT"      PRESS RETURN"
1530 PRINT"[ 2*CD]LOAD[ 4*CD][ 3*CU]"
1540 NEW
2000 DATA0,0,0,6,6,8,28,26,42,22,24,20,36,66,130,131,0,0,0,1,1,2,2,6
2010 DATA0,0,0,128,128,0,0,0,7,7,6,14,26,34,18,3,0,0,0,0,1,1,2,1
2020 DATA0,0,0,96,96,128,128,128,192,192,128,128,128,128,192,0
2030 DATA0,0,0,0,0,0,1,0,0,0,0,24,24,32,96,112,168,168,32,80,136,138,4,128
2040 DATA3,3,30,46,25,30,210,179,57,109,75,69,57,184,68,130,254,130,68,56,108,68
,68,198
2050 DATA2,58,59,57,17,63,120,184,184,184,40,40,40,40,40,108,5,2,5,2,5,2,5,2
2060 DATA0,0,0,255,0,0,0,0,0,0,0,0,0,0,0,12,12,8,28,42,28,20,54
2070 DATA48,16,20,18,250,132,27,35,24,24,126,126,24,24,60,126
2080 DATA255,255,255,255,255,255,255,255
2090 DATA181,3,181,2,181,1,181,3,193,2,189,1,189,2,181,1,181,2,172,1,181,4
2100 DATA206,1,214,1,206,1,209,1,214,4,206,1,214,1,206,1,209,1,214,5,224,1,224,1
2110 DATA224,1,224,1,218,1,222,1,218,1,224,1,218,1,222,1,218,4,-1
READY.
```

Allo?, Ah ahm Unspecteu Cleudeau of the Sureté....

I
YOU
SHOPS
FROM
19th MAY


Les Flics
LES PINK

ah neu eggsactley weut yew are eup tew, beceuse that ees mei jeub.

Ah neu yew are geuing tew trah en steal a gem steun in mei care .... beut eet weel naught be eezee mei frend, eau neau, me and mei treusty servant Kaolin weel be tryin to steup yew.

Not eaunly zat, beut Les Flics, the treu gend'armerie eunder mei commant weel be out en force, so, you foel, you 'ave neo chance aggenst Cleudeau..............

You control that Pink character with the tail in your quest for the Purple Puma, a priceless gemstone, avoid the Police cars and enter the buildings, evading Gendarme Kaolin (disguised as a chef) and of course Cleudeau himself.

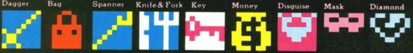
Pick up the items as you find them, we leave you to find out what they do!

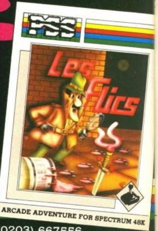
Bon Chance ....

£6·95

Arcade Adventure For Spectrum 48K

Items to collect:


Dagger
Bag
Spanner
Knife & Fork
Key
Money
Disguise
Mask
Diamond


PSS
Les Flics
ARCADE ADVENTURE FOR SPECTRUM 48K

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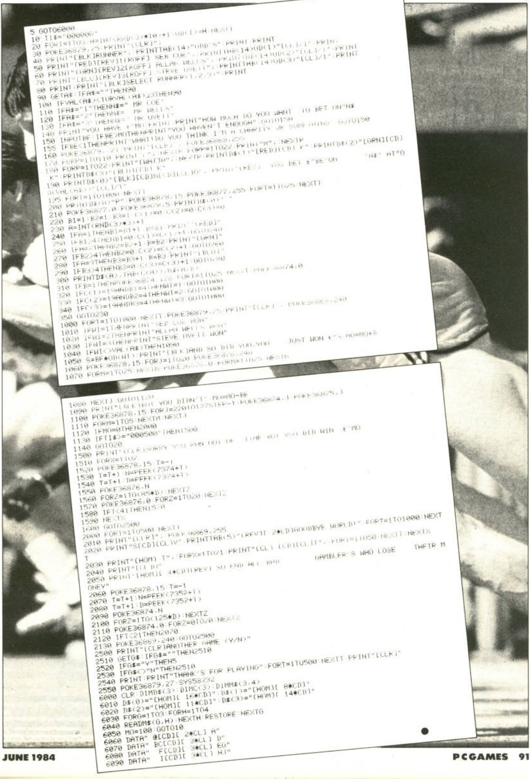


```
5 GOTO6000
10 TI$="000000"
20 FORI=1TO3:H=INT(RND(3)*10)+1:OD(I)=H:NEXTI
30 POKE36879,25:PRINT"[CLR]";
40 PRINT"[BLK]RUNNER",:PRINTTAB(14)"ODD'S":PRINT:PRINT
50 PRINT"[RED][REV]1[ROFF] SEB COE",:PRINTTAB(14)OD(1)"[CL]/1":PRINT
60 PRINT"[GRN][REV]2[ROFF] ALLAN WELLS",:PRINTTAB(14)OD(2)"[CL]/1":PRINT
70 PRINT"[BLU][REV]3[ROFF] STEVE OVETT",:PRINTTAB(14)OD(3)"[CL]/1":PRINT
80 PRINT:PRINT"[BLK]SELECT RUNNER(1,2,3)":PRINT
90 GETA$:IFA$=""THEN90
100 IFVAL(A$)<1ORVAL(A$)>3THEN90
110 IFA$="1"THENN$=" MR COE"
120 IFA$="2"THENN$=" MR WELLS"
130 IFA$="3"THENN$=" MR OVETT"
140 PRINT"YOU HAVE £"MO:PRINT:PRINT"HOW MUCH DO YOU WANT  TO BET ON"N$
150 INPUTBE:IFBE>MOTHENPRINT"YOU HAVEN'T ENOUGH":GOTO150
155 IFBE<1THENPRINT"WHAT DO YOU THINK I'M A CHARITY OR SOMETHING":GOTO150
160 POKE36879,27:PRINT"[CLR]";:POKE36869,255
170 FORP=1TO110:PRINT" ";:NEXTP:FORP=1TO22:PRINT"M";:NEXTP
180 FORP=1TO22:PRINT"[WHT]O";:NEXTP:PRINTD$(1)"[RED][CD] K":PRINTD$(2)"[GRN][CD]
 K":PRINTD$(3)"[BLU][CD] K"
190 PRINTD$(0)"[BLK][CD]N[CD][CL]O":PRINT"[REV] YOU BET £"BE"ON      "N$" AT"O
D(VAL(A$))"[CL]/1"
195 FORI=1TO1000:NEXTI
200 PRINTD$(0)"P":POKE36878,15:POKE36877,255:FORT=1TO25:NEXTT
210 POKE36877,0:POKE36878,5:PRINTD$(0)" "
220 B1=1:B2=1:B3=1:C(1)=0:C(2)=0:C(3)=0
230 A=INT(RND(3)*3)+1
240 IFA=1THENB1=B1+1:B=B1:PRINT"[RED]"
250 IFB1>4THENB1=0:C(1)=C(1)+1:GOTO240
260 IFA=2THENB2=B2+1:B=B2:PRINT"[GRN]"
270 IFB2>4THENB2=0:C(2)=C(2)+1:GOTO260
280 IFA=3THENB3=B3+1:B=B3:PRINT"[BLU]"
290 IFB3>4THENB3=0:C(3)=C(3)+1:GOTO280
300 PRINTD$(A),TAB(C(A));M$(A,B)
310 IFB=1THENPOKE36874,128:FORT=1TO25:NEXTT:POKE36874,0
320 IFC(1)=19ANDB1=4THENWI=1:GOTO1000
330 IFC(2)=19ANDB2=4THENWI=2:GOTO1000
340 IFC(3)=19ANDB3=4THENWI=3:GOTO1000
350 GOTO230
1000 FORT=1TO1000:NEXTT:POKE36879,25:PRINT"[CLR]":POKE36869,240
1010 IFWI=1THENPRINT"SEB COE WON"
1020 IFWI=2THENPRINT"ALLAN WELLS WON"
1030 IFWI=3THENPRINT"STEVE OVETT WON"
1040 IFWI<>VAL(A$)THEN1090
1050 S=BE*OD(WI):PRINT"[BLK]AND SO DID YOU.YOU    JUST WON £"S:MO=MO+S
1060 POKE36878,15:FORJ=1TO20:POKE36876,240:FORM=1TO25:NEXTM
1070 FORM=1TO25:NEXTM:POKE36876,0:FORM=1TO25:NEXTM
```

```
1080 NEXTJ:GOTO1120
1090 PRINT"[BLK]BUT YOU DIDN'T":MO=MO-BE
1100 POKE36878,15:FORJ=220TO127STEP-1:POKE36874,J:POKE36875,J
1110 FORM=1TO5:NEXTM:NEXTJ
1120 IFMO=0THEN2000
1130 IFTI$>="000500"THEN1500
1140 GOTO20
1500 PRINT"[CLR]SORRY YOU RAN OUT OF  TIME BUT YOU DID WIN  £"MO
1510 FORX=1TO2
1520 POKE36878,15:T=-1
1530 T=T+1:N=PEEK(7374+T)
1540 T=T+1:D=PEEK(7374+T)
1550 POKE36876,N
1560 FORZ=1TO(85*D):NEXTZ
1570 POKE36876,0:FORZ=1TO20:NEXTZ
1580 IFT<41THEN1530
1590 NEXTX
1600 GOTO2500
2000 FORT=1TO500:NEXTT
2010 PRINT"[CLR]";:POKE36869,255
2020 PRINT"S[CD][CL]V":PRINTTAB(5)"[REV][ 2*CD]GOODBYE WORLD!":FORT=1TO1000:NEXT
T
2030 PRINT"[HOM] T";:FORX=1TO21:PRINT"[CL] [CD][CL]T";:FORI=1TO50:NEXTI:NEXTX
2040 PRINT"[CL] O"
2050 PRINT"[HOM][ 4*CD][REV] SO END ALL BAD        GAMBLER'S WHO LOSE    THEIR M
ONEY"
2060 POKE36878,15:T=-1
2070 T=T+1:N=PEEK(7352+T)
2080 T=T+1:D=PEEK(7352+T)
2090 POKE36874,N
2100 FORZ=1TO(125*D):NEXTZ
2110 POKE36874,0:FORZ=0TO20:NEXTZ
2120 IFT<21THEN2070
2130 POKE36869,240:GOTO2500
2500 PRINT"[CLR]ANOTHER GAME (Y/N)"
2510 GETG$:IFG$=""THEN2510
2520 IFG$="Y"THEN5
2530 IFG$<>"N"THEN2510
2540 PRINT:PRINT"THANK'S FOR PLAYING":FORT=1TO500:NEXTT:PRINT"[CLR]"
2550 POKE36879,27:SYS58232
6000 CLR:DIMD$(3):DIMC(3):DIMM$(3,4)
6010 D$(0)="[HOM][ 16*CD]":D$(1)="[HOM][ 8*CD]"
6020 D$(2)="[HOM][ 11*CD]":D$(3)="[HOM][ 14*CD]"
6030 FORG=1TO3:FORH=1TO4
6040 READM$(G,H):NEXTH:RESTORE:NEXTG
6050 MO=100:GOTO10
6060 DATA" @[CD][ 2*CL] A"
6070 DATA" BC[CD][ 3*CL] D"
6080 DATA"  F[CD][ 3*CL] EG"
6090 DATA"  I[CD][ 3*CL] HJ"
```

Jeremy Hammett

Original program by Jeff Aughton

You are in command of the last gun protecting the River Thames and a fleet of enemy ships is attempting to break through to take London. It is your job to save the nation!

When the ships appear you must adjust the elevation and bearing of your gun to position it for firing. If three enemy vessels get through, all is lost!

You can specify your own keyboard controls or use those in the program:

Increase elevation = q
Decrease elevation = a
Increase bearing = . (full stop)
Decrease bearing = /
Fire gun = <SPACE>

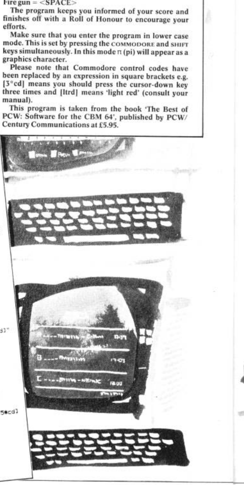
The program keeps you informed of your score and finishes off with a Roll of Honour to encourage your efforts.

Make sure that you enter the program in lower case mode. This is set by pressing the COMMODORE and SHIFT keys simultaneously. In this mode π (pi) will appear as a graphics character.

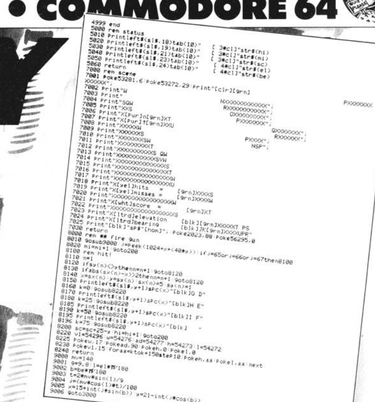
Please note that Commodore control codes have been replaced by an expression in square brackets e.g. [3*cd] means you should press the cursor-down key three times and [ltrd] means 'light red' (consult your manual).

This program is taken from the book 'The Best of PCW: Software for the CBM 64', published by PCW/Century Communications at £5.95.

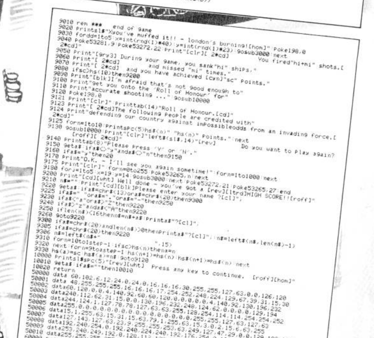
```
10 Printchr$(8)chr$(14):Poke52,48:Poke56,48:clr:Poke650,128:gosub2000
11 ie$="q":de$="a":ib$="/":db$=".":fg$=" ":q$=chr$(34):s$="X"
12 sp$="":forn=1to39:sp$=sp$+s$:next
13 dimsx(10),sy(10)
15 Print"[clr]":sl$="[hom][ 24*cd]":cl$="[blk][gry1][brn][red][ltrd][gry2][ltbl]
[ltgr][cyn][yel][gry3][wht]"
16 deffnb(x)=Peek(1024+sx(x)+(40*sy(x)))+Peek(1025+sx(x)+(40*sy(x)))
17 deffna(x)=fnb(x)+Peek(1026+sx(x)+(40*sy(x)))-96
18 forn=1to10:hs$(n)="Mike Ro.          ":hs(n)=1100-(100*n):next
20 gosub4000:gosub7000
30 el=30:be=0:sc=0:hi=0:mi=0
40 ns=int(rnd(1)*7)+3
50 forn=1tons
60 sx(n)=int(rnd(1)*20)+1:sy(n)=int(rnd(1)*5)+1:iffna(n)<>0then60
70 Printleft$(sl$,sy(n)+1)sPc(sx(n))"[blk]ABC";
80 next
100 geta$:ifa$=""then200
110 ifa$=ie$thenel=el+1
120 ifa$=de$thenel=el-1
130 ifa$=ib$thenbe=be+1
140 ifa$=db$thenbe=be-1
150 ifa$=fg$then8000
160 ifel>90thenel=90
170 ifel<0thenel=0
175 ifbe=314thenbe=315
180 ifbe<0thenbe=be+360
185 ifbe=91thenbe=90
190 ifbe>359thenbe=0
200 Pokev1,0:Poke198,0:ifrnd(1)>.5then300
210 sh=int(rnd(1)*ns)+1:mx=sx(sh):my=sy(sh)
220 Printleft$(sl$,my+1)sPc(mx)"   "
230 mx=mx+1:my=my+int(rnd(1)*4)-1:ifmy<2thenmy=2
240 zz=1024+mx+(40*my):ifmx=37ormy>21thenes=es+1:mx=5:my=1:ifes>2then9010
250 ifPeek(zz-38)<>32andPeek(zz+42)<>32thenmx=mx-2:goto240
260 ifPeek(zz)=32andPeek(zz+1)=32andPeek(zz+2)=32thensx(sh)=mx:sy(sh)=my
270 Printleft$(sl$,sy(sh)+1)sPc(sx(sh))"ABC"
300 gosub5000:goto100
1000 data10,7,8,0,-1
1001 data1,1,2,3,6,6,13,14,9,9,8,8,-1
1010 rem sprite
1020 data0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0
1022 data0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,9,16,128,4,162,0,2,164,0,1,248,0
1024 data8,0,0,2,0,0,1,0,0,0,0,0,0,0,192,16,1,0,8,2,16,0,0,0,4,0,64,128,0,0,64
1026 data48,0,5,141,64,26,66,16,34,68,36,16,70,34,18,73,98,10,9,66,9
1028 data16,136,4,162,32,66,132,70,180,51,17
1030 data0,0,0,0,0,0,0,0,0,0,0,0,1,192,0,2,33,128,4,26,32,9,87,112,11,5,204
1032 data160,136,33,132,145,21,104,160,8,130,66,17,162
1034 data68,36,80,68,33,18,72,97,10,34,66,9,0,136,4,0,32,0,0,0,0,0,0
1036 data1,96,48,70,82,204,108,75
1037 data12,152,130,30,152,6,114,162,32,162,66,26,36,73,0
1038 data112,137,133,204,160,128,33
1039 data132,161,21,104,160,8,130,0,17,160,0,36,80,0,1,16
1040 data0,1,104,2,18,25,0,136,32,0,36,64,0,3,128,0,1
2000 ifPeek(16128)=0andPeek(16129)=0thenreturn
2001 restore:forn=1to18:reada:next
2005 Print"[clr][ 5*cd]  setting up graphics - Please read[cd]
'war & Peace'"
2010 fors=252to255:forn=0to62:reada:Poke64*s+n,a:next:next
2020 rem
2030 cs=12288:Poke56334,Peek(56334)and254:Poke1,Peek(1)and251
2040 forn=cstocs+512:Poken,Peek(53248+n-cs):next
2050 Poke1,Peek(1)or4:Poke56334,Peek(56334)or1
2060 n=12800
2070 reada:ifa>-1thenPoken,a:n=n+1:goto2070
2090 Poke53272,29:return
3000 restore:forn=0to3:reada:Pokev+39+n,a:next:reada
3005 v1=54296:w=54276:ad=54277:h=54273:l=54272:v=53248:Pokev+21,0
3010 Pokev+21,0:gx=0:ex=(x*8)+15:ey=(y*8)+35:ifex>255thengx=255:ex=ex-256
3020 forn=0to3:Poke2040+n,252+n:next
3025 forn=vtov+7step2:Poken,ex:Poken+1,ey:next:Pokev+16,gx
3030 Pokev+23,0:Pokev+29,0
3050 v2=15
3060 Pokev1,15:Pokew,17:Pokead,7:form=255to0step-1:Pokeh,m:next:Pokev1,0:Pokew,0
3070 reada:ifa=-1thenPokev+21,0:Pokev1,0:Pokead,0:Pokew,0:return
3080 Pokev1,v2:Pokead,137:Pokew,129:Pokeh,1:Pokel,30:v2=v2-1:ifv2<0thenv2=0
3090 Pokev+21,a
3100 form=1toa:next:goto3070
3110 return
4000 rem
4005 Print"[clr]":Poke53272,23:Poke53280,0:forn=1tolen(cl$)-1
4010 Printmid$(cl$,n,1)"[rev]               C O N V O Y               [roff]";:ne
xt
4015 forn=len(cl$)to1step-1
4016 Printmid$(cl$,n,1)"[rev]               C O N V O Y               [roff]";:ne
xt
4030 gosub10000:Poke53281,0
4040 Print"[clr][rev][yel]      C   O   N   V   O   Y   !      [roff][cd]"
4042 Print"[wht]   You are in command of the LAST gun"
4044 Print"protecting the River Thames and a fleet"
4046 Print"of enemy ships is attempting to break"
4048 Print"through to take London.[ 2*cd]"
4050 Print"[red]   Obviously, they must be stopped at"
4052 Print"all costs - your life depends on it!"
4054 Print"( Not to mention those of several"
4056 Print"million others! )"
4058 Print"[ 2*cd]   [yel]When the ships appear, you must"
4060 Print"adjust the ELEVATION and BEARING of the"
4062 Print"gun and destroy them. If three get past"
4064 Print"you, they will start to bombard the cityand the all will be lost!"
4066 gosub10000
4068 Print"[clr][rev][yel]      C   O   N   V   O   Y   !      [roff][ 2*cd]"
4070 rem keys
4072 Printtab(3)"[ltgr][rev] Current Keyboard Controls are :- [roff]"
4074 Print"[ 3*cd]":Printtab(7)"Increase Elevation   : "q$ie$q$
4076 Printtab(7)"[cd]Decrease Elevation   : "q$de$q$
4078 Printtab(7)"[cd]Increase Bearing     : "q$ib$q$
4080 Printtab(7)"[cd]Decrease Bearing     : "q$db$q$
4082 Printtab(7)"[cd]FIRE GUN             : "q$fg$q$
4084 Print"[ 4*cd]Do you want to alter any of these? (Y/N)"
4086 gosub10010:ifa$="y"ora$="Y"then4100
4088 ifa$<>"n"anda$<>"N"then4086
4090 Print"[ 2*cu][rev][pur]   O.K.  Here we go then.  Good Luck!   [roff]"
4092 forn=1to999:next
4098 return
4100 Print"[clr][rev][ltrd]      C   O   N   V   O   Y   !      [roff][ 5*cd]
"
4102 Print"Please Press Key to"
4104 a$="Increase Elevation":gosub4200:ie$=a$
4105 a$="Decrease Elevation":gosub4200:de$=a$
4106 a$="Increase Bearing  ":gosub4200:ib$=a$
4107 a$="Decrease Bearing  ":gosub4200:db$=a$
4108 a$="FIRE GUN          ":gosub4200:fg$=a$
4109 goto4068
4200 Printleft$(sl$,8)sPc(20)a$:gosub10010:return
```



VOY
THE FUTURE STARTS HERE!



```
4999 end
5000 rem status
5010 Printleft$(sl$,18)tab(10)"      [ 3*cl]"str$(hi)
5020 Printleft$(sl$,19)tab(10)"      [ 3*cl]"str$(mi)
5040 Printleft$(sl$,21)tab(10)"      [ 3*cl]"str$(sc)
5050 Printleft$(sl$,23)tab(10)"       [ 4*cl]"str$(el)
5060 Printleft$(sl$,24)tab(10)"       [ 4*cl]"str$(be)
7000 rem scene
7001 Poke53281,6:Poke53272,29:Print"[clr][9rn]
XXXXXX";
7002 Print"W                                                        PXXXXXXX
7003 Print"                              NXXXXXXXXXXXX";
7004 Print"SQW                            RXXXXXXXXXXX";
7005 Print"XXS                             OXXXXXXXXX";
7006 Print"X[Pur]n[9rn]XT                    PXXXXXXX";
7007 Print"X[Pur]↑[9rn]XXU
7008 Print"XXXXXW                                   QXXXXXXX";
7009 Print"XXXXXXS                                   RXXXXXX";
7010 Print"XXXXXXXSW                        PXXXX";
7011 Print"XXXXXXXXXT                        NSP";
7012 Print"XXXXXXXXXXS QW
7013 Print"XXXXXXXXXXXSVW
7014 Print"XXXXXXXXXXXXXS
7015 Print"XXXXXXXXXXXXXXT
7016 Print"XXXXXXXXXXXXXXXW
7017 Print"XXXXXXXXXXXXXXXXU
7018 Print"X[yel]hits    =     [9rn]XXXXS
7019 Print"X[yel]misses =     [9rn]XXXXW
7020 Print"XXXXXXXXXXXXXXXXXW
7021 Print"X[wht]score  =        [9rn]XT
7022 Print"XXXXXXXXXXXXXXXXXXS
7023 Print"X[ltrd]elevation     [blk][9rn]XXXXXT PS
7024 Print"X[ltrd]bearing       [blk]JK[9rn]XXXXUPR"
7025 Print"[blk]"sP$"[hom]";:Poke2023,88:Poke56295,0
7030 return
8000 rem ## fire gun
8010 gosub9000:j=peek(1024+x+(40*y)):ifj=65orj=66orj=67then8100
8020 mi=mi+1:goto200
8100 rem hit!
8110 n=1
8120 ifsy(n)<>ythenn=n+1:goto8120
8130 ifabs(sx(n)-x)>2thenn=n+1:goto8120
8140 x=sx(n):y=sy(n):sx(n)=5:sy(n)=1
8150 Printleft$(sl$,y+1)sPc(x)"[blk]G D"
8160 k=0:gosub8220
8170 Printleft$(sl$,y+1)sPc(x)"[blk]H E"
8180 k=25:gosub8220
8185 Printleft$(sl$,y+1)sPc(x)"[blk]I F"
8190 k=50:gosub8220
8195 Printleft$(sl$,y+1)sPc(x)"[blk]   "
8196 k=75:gosub8220
8200 sc=sc+25-y:hi=hi+1:goto200
8220 vl=54296:w=54276:ad=54277:h=54273:l=54272
8225 Pokew,17:Pokead,90:Pokeh,0:Pokel,0
8230 Pokevl,15:foraa=ktok+150steP10:Pokeh,aa:Pokel,aa:next
8240 return
9000 mv=140
9001 g=9.8:l=el*π/180
9002 b=be*π/180
9003 t=2*mv*sin(l)/g
9004 j=(mv*cos(l)*t)/100
9005 x=15+int(j*sin(b)):y=21-int(j*cos(b))
9006 goto3000
```



```
9010 rem ***   end of game
9020 Printsl$"Xyou've muffed it!! - london's burning![hom]":Poke198,0
9030 fordd=1to5:x=int(rnd(1)*40):y=int(rnd(1)*23):gosub3000:next
9040 Poke53281,9:Poke53272,22:Print"[clr][ 2*cd]             You fired"hi+mi" shots.[
 2*cd]"
9050 Print"[gry3] During your game, you sank"hi" ships,"
9060 Print"[ 2*cd]          and missed "mi" times."
9070 Print"[ 2*cd]  and you have achieved [cyn]"sc" Points."
9080 ifsc>hs(10)then9200
9090 Print"[blk]I'm afraid that's not good enough to"
9100 Print"get you onto the 'Roll of Honour' for"
9110 Print"accurate shooting ...":gosub10000
9120 Poke198,0
9121 Print"[clr]":Printtab(14)"Roll of Honour.[cd]"
9123 Print"[ 2*cd]The following PeoPle are credited with"
9124 Print"defending our country against imPossibleodds from an invading force.[
 2*cd]"
9125 forn=1to10:PrintsPc(5)hs$(n)" "hs(n)" Points.":next
9130 gosub10000:Print"[clr]"left$(sl$,14)"[rev]          Do you want to Play again?
     [roff][ 2*cd]"
9140 Printtab(8)"Please Press 'Y' or 'N'."
9150 geta$:ifa$<>"y"anda$<>"n"then9150
9160 ifa$="y"then20
9170 Print"O.K. - I'll see you again sometime!":forn=1to1000:next
9175 Print"[clr]":forn=0to255:Poke53265,n:next
9180 forj=1to5:x=19:y=14:gosub3000:next:Poke53272,21:Poke53265,27:end
9200 Print"[cd][wht] Well done - you've got a [rev][ltrd]HIGH SCORE!![roff]"
9210 n$="":Print"[cd][blk]Please enter your name ?[cl]";
9220 geta$:ifa$=chr$(13)ora$=chr$(20)then9300
9225 ifa$=" "ora$="."ora$="-"then9250
9230 ifa$<"a"ora$>"Z"then9220
9240 ifa$>"z"anda$<"A"then9220
9250 iflen(n$)<16thenn$=n$+a$:Printa$"?[cl]";
9260 goto9220
9300 ifa$=chr$(20)andlen(n$)>0thenPrinta$"?[cl]";:n$=left$(n$,len(n$)-1)
9305 ifa$=chr$(20)then9220
9306 n$=left$(n$+"                ",15)
9310 forn=10to1steP-1:ifsc>hs(n)thena=n
9320 next:forn=9toasteP-1:hs(n+1)=hs(n):hs$(n+1)=hs$(n):next
9330 hs(a)=sc:hs$(a)=n$:goto9120
10000 Printsl$sPc(5)"[rev][wht]  Press any key to continue.  [roff][hom]"
10010 geta$:ifa$=""then10010
10020 return
50000 data 60,102,6,12,24,0,24,0,16,16,16,30,255,255,127,63,0,0,126,120
50001 data 48,255,255,255,16,16,16,17,254,252,248,224,129,67,39,31,15,30
50002 data60,120,0,0,4,140,92,60,60,120,0,0,0,0,4,140,92,130,196,232
50003 data240,112,62,31,15,0,0,130,196,232,248,124,62,0,0,0,0,129,194
50004 data244,124,1,127,78,78,127,63,63,255,128,254,114,114,254,254,252
50005 data255,0,0,0,0,0,0,0,0,0,0,0,0,0,255,255,127,63,127,63
50006 data15,1,255,63,15,31,15,63,79,1,255,63,15,3,0,2,15,6,63,255
50007 data127,143,127,63,23,9,255,255,253,63,249,127,47,29,0,0,128,192,128
50008 data192,240,254,0,192,240,224,240,192,176,254,0,192,240,252,255
50009 data253,240,249,192,0,128,112,128,192,232,246,0,0,2,192,6,128,208,226
50010 data255,255,255,255,255,255,255,255,-1
60000 Print"[clr]":forn=0to255:Poke1024+n,n:Poke55296+n,0:next
60001 forn=0to255:Poke53272,n:wait198,15:geta$:Print"[hom][ 7*cd]"n"    ":next
```

CITY SMASHER

For the BBC

By N.E. Bell

In this game you take the role of a pilot in a crashing aeroplane. In order to land you must bomb the city beneath you, while avoiding crashing into the buildings. As well as bombs, you have a laser cannon which can be used four times in each game, and a 'down' button, just in case you should want to increase your descent. Further instructions are included in the program.

Program Structure

Lines 40-230 print title page and instructions.
Lines 280-360 define envelope and graphics.
Lines 400-530 main loop.

PROCBUILD	Draws city.
PROCLAND	Landing routine.
PROCCRASH	Crash routine for when plane hits building.
PROCBOMB	Prints bomb and moves it.
PROCHIT	Routine for bomb hitting building. (Explosion, resets bombflag, increases score, etc.)
PROCFIRE	Routine for firing laser cannon.

Variables

A	Horizontal position of plane.
B	Vertical position of plane.
SCORE	Number of points scored.
SIZE	Size of buildings. (The smaller value for SIZE, the bigger the buildings.)
MISL	Number of laser blasts left. (Four at start of game.)
LEV	Level number. Each city is a new level.
FLAG	Set to one to escape from repeat-until loop.
BOMFLAG	Set to 1 when a bomb is falling. Tells computer to call PROCOMB and stops another bomb being dropped while bomb is falling.
X	Horizontal position of bomb.
Y	Vertical position of bomb.

```
  10REM   CITY SMASHER
  20REM  (C)N.BELL 1984
  30*TV255
  40MODE7
  50PRINTCHR$141;CHR$131;"          CI
TY SMASHER"
  60PRINTCHR$141;CHR$130;"          CI
TY SMASHER"
  70PRINTCHR$141;CHR$131;"       (C) N
.E.Bell 1984"
  80PRINTCHR$141;CHR$130;"       (C) N
.E.Bell 1984"
  90PRINT:PRINTCHR$129;"THE IDEA OF THE
GAME IS TO SURVIVE AS"
  100PRINTCHR$129;"LONG AS POSSIBLE WITH
OUT CRASHING."
  110PRINT:PRINTCHR$134;"TO DO THIS YOU
MUST BOMB THE BUILDINGS"
  120PRINTCHR$134;"WHICH STAND IN YOUR W
AY.IF YOU TOTALLY"
  130PRINTCHR$134;"DESTROY THE CITY,IT I
S REPLACED BY A"
  140PRINTCHR$134;"BIGGER ONE' AS WELL A
S BOMBS,YOU ARE"
  150PRINTCHR$134;"EQUIPPED WITH A FORWA
RD FIRING LASER,"
  160PRINTCHR$134;"BUT THIS CAN ONLY BE
USED FOUR TIMES"
  170PRINTCHR$134;"IN EACH GAME.THERE IS
ALSO A DOWN CON-"
  180PRINTCHR$134;"TROL,SHOULD YOU WISH
TO USE IT."
  190PRINT:PRINTCHR$129;"    USE SPACE B
AR TO DROP BOMBS"
  200PRINT:PRINTCHR$129;"    USE KEY 'A
' TO FIRE LASER"
  210PRINTCHR$129;"    USE KEY 'Z' TO M
OVE DOWN"
  220PRINT:PRINTCHR$141;CHR$130;"   PRES
S KEY 'S' TO START GAME"
  230PRINTCHR$141;CHR$131;"   PRESS KEY
'S' TO START GAME"
  240*FX15,1
  250IFINKEY$(0)="S"THENGOTO270
  260GOTO250
  270MODE2
  280ENVELOPE1,1,5,0,0,25,0,0,126,0,0,-1
26,126,126
  290VDU23;8202;0;0;0;0;0;0
  300VDU23,224,255,153,153,255,255,153,1
53,255
  310VDU23,225,0,0,0,0,195,195,195,0
  320VDU23,226,255,255,255,255,255,255,2
55,255
  330VDU23,227,128,192,224,255,243,115,6
3,31
  340VDU23,228,0,0,0,240,60,63,255,254
  350VDU23,229,60,24,24,60,60,60,60,24
  360VDU23,230,72,2,164,1,72,36,0,136
  370SCORE=0:SIZE=15:MISL=4:LEV=1
  380A=0:B=0:FLAG=0:BOMBFLAG=0:CLS
  390PROCBUILD
  400REPEAT
  410COLOUR7:PRINTTAB(A,B)CHR$32;CHR$227
;CHR$228
  420PRINTTAB(1,30)"SCORE=";SCORE:PRINTT
AB(17,30)"L";LEV
  430A=A+1
  440IFA=20THENA=0:B=B+1
  450FORM=1TO40:NEXTM
  460Z$=INKEY$(0)
  470IFZ$=" "ANDBOMBFLAG=0ANDB<28THENBOM
BFLAG=1:X=A:Y=B
  480IFZ$="A"ANDB>0ANDMISL>0THENPROCFIRE
  490IFZ$="Z"ANDB<27THENPRINTTAB(A,B)"
":B=B+1
  500IFBOMBFLAG=1THENPROCBOMB
  510IFB=28ANDA=18THENPROCLAND
  520IFPOINT((A+2)*64+3,1024-(B+1)*32+16
)=6THENPROCCRASH
  530UNTILFLAG=1
  540IFA=18THENSIZE=SIZE-2:IFSIZE<1THENS
IZE=1
  550IFA=18THENLEV=LEV+1:GOTO380
  560COLOUR5:PRINTTAB(1,10)"     SCORE=";
SCORE:TAB(0,15)"  PRESS KEY 'S' FOR":TAB
(0,17)"    ANOTHER GAME"
  570*FX15,1
  580IFINKEY$(0)="S"THENGOTO270
  590GOTO580
  600DEFPROCBUILD
  610FORF=2TO19STEP2
  620FORG=29TOSIZE+RND(6)STEP-1
  630COLOUR6:PRINTTAB(F,G)CHR$224
  640NEXTG
  650COLOUR12:PRINTTAB(F,G)CHR$225
  660NEXTF
  670FORH=1TO19:COLOUR2:PRINTTAB(H,29)CH
R$226:NEXTH
  680ENDPROC
  690DEFPROCLAND
  700COLOUR5:PRINTTAB(2,15)"YOU HAVE LAN
DED!"
  710SOUND1,1,40,44
  720FORR=1TO3500:NEXTR
  730LETSCORE=SCORE+1000
  740FLAG=1
  750ENDPROC
  760DEFPROCCRASH
  770SOUND0,-15,110,55:PRINTTAB(A,B)CHR$
230:PRINTTAB(A+1,B)CHR$230
  780FORD=1TO10
  790VDU19,6,1,0,0,0:VDU19,12,1,0,0,0:VD
U19,7,1,0,0,0:VDU19,2,1,0,0,0
  800FORR=1TO200:NEXTR
  810VDU19,6,7,0,0,0:VDU19,12,7,0,0,0:VD
U19,7,7,0,0,0:VDU19,2,7,0,0,0
  820FORR=1TO200:NEXTR
  830NEXTD
  840CLS:FLAG=1
  850ENDPROC
  860DEFPROCBOMB
  870COLOUR5:PRINTTAB(X,Y)CHR$32:PRINTTA
B(X,Y+1)CHR$229
  880IFPOINT(X*64+4,1024-(Y+3)*32+7)=6TH
ENPROCHIT
  890IFY=27THENPRINTTAB(X,Y+1)CHR$32:BOM
BFLAG=0
  900Y=Y+1
  910SOUND1,-10,(32-Y)*5,1
  920ENDPROC
  930DEFPROCHIT
  940COLOUR1
  950SOUND0,-15,100,5
  960PRINTTAB(X,Y+1)CHR$32:PRINTTAB(X,Y+
2)CHR$230:PRINTTAB(X,Y+3)CHR$230:PRINTTA
B(X,Y+4)CHR$230
  970VDU19,1,3,0,0,0:FORS=1TO50:NEXTS:VD
U19,1,1,0,0,0:FORS=1TO50:NEXTS
  980PRINTTAB(X,Y+2)CHR$32:PRINTTAB(X,Y+
3)CHR$32:PRINTTAB(X,Y+4)CHR$32
  990COLOUR2:PRINTTAB(X,29)CHR$226
  1000BOMBFLAG=0:SCORE=SCORE+100
  1010ENDPROC
  1020DEFPROCFIRE
  1030SOUND2,1,100,10
  1040MOVE(A+2)*64,1024-(B*32)-25
  1050GCOL0,1
  1060DRAW1280,1024-(B*32)-25:FORF=1TO100
:NEXTF
  1070PRINTTAB(0,B-1);"
                          "
  1080MISL=MISL-1
  1090ENDPROC
```

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❹ A brief description of the game, including any instructions.
❺ A brief explanation of the function of each part of the program.
❻ A table, giving the meaning of each variable.

PROGRAM SUBMISSION FORM

Name .... Age ....
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(if possible) ....
....
....

Name of program ....
Machine (including memory requirements) ....

I declare that this is an original program which has not been previously published.
....

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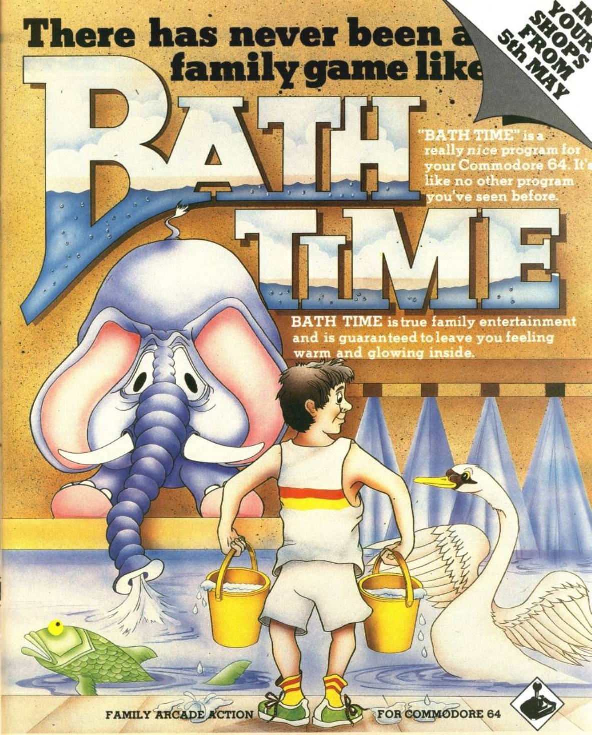
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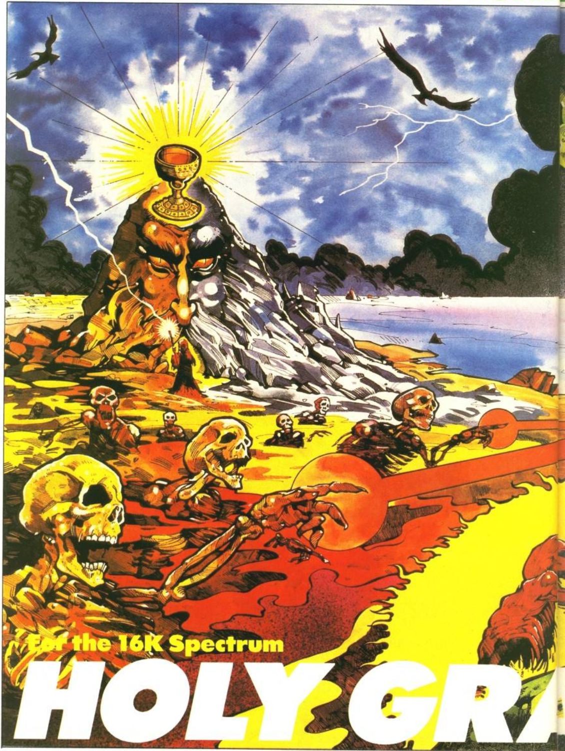
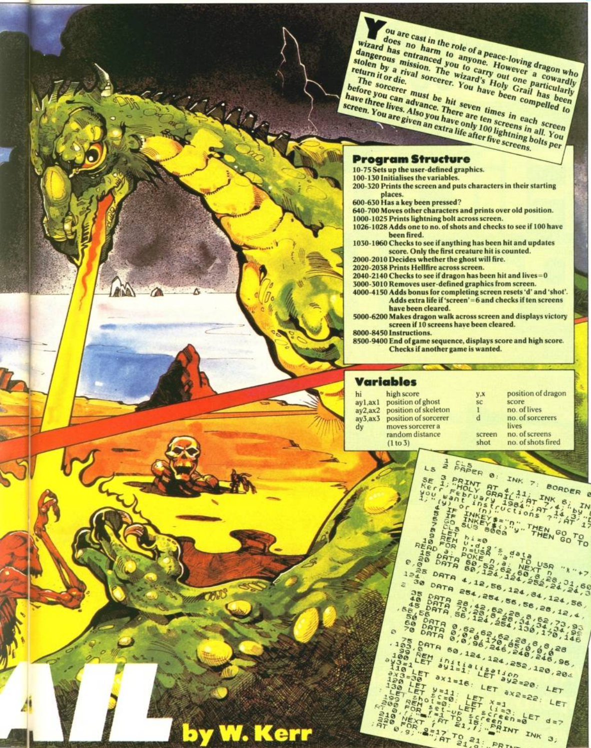


For the 16K Spectrum

HOLY GR

Jeff Riddle



You are cast in the role of a peace-loving dragon who does no harm to anyone. However a cowardly wizard has entranced you to carry out one particularly dangerous mission. The wizard's Holy Grail has been stolen by a rival sorcerer. You have been compelled to return it or die.

The sorcerer must be hit seven times in each screen before you can advance. There are ten screens in all. You have three lives. Also you have only 100 lightning bolts per screen. You are given an extra life after five screens.

Program Structure

10-75 Sets up the user-defined graphics.
100-130 Initialises the variables.
200-320 Prints the screen and puts characters in their starting places.
600-630 Has a key been pressed?
640-700 Moves other characters and prints over old position.
1000-1025 Prints lightning bolt across screen.
1026-1028 Adds one to no. of shots and checks to see if 100 have been fired.
1030-1060 Checks to see if anything has been hit and updates score. Only the first creature hit is counted.
2000-2010 Decides whether the ghost will fire.
2020-2038 Prints Hellfire across screen.
2040-2140 Checks to see if dragon has been hit and lives=0
3000-3010 Removes user-defined graphics from screen.
4000-4150 Adds bonus for completing screen resets 'd' and 'shot'. Adds extra life if 'screen'=6 and checks if ten screens have been cleared.
5000-6200 Makes dragon walk across screen and displays victory screen if 10 screens have been cleared.
8000-8450 Instructions.
8500-9400 End of game sequence, displays score and high score. Checks if another game is wanted.

Variables

hi	high score	y,x	position of dragon
ay1,ax1	position of ghost	sc	score
ay2,ax2	position of skeleton	l	no. of lives
ay3,ax3	position of sorcerer	d	no. of sorcerers lives
dy	moves sorcerer a random distance (1 to 3)	screen	no. of screens
		shot	no. of shots fired

```
  1 CLS
  2 PAPER 0: INK 7: BORDER 0: C
LS
  3 PRINT AT 4,11; INK 6; INVER
SE 1;"HOLY GRAIL";AT 7,4;"by W.
Kerr February 1984";AT 14,3;"Do
you want instructions ?";AT 17,1
1;"(y) or (n)"
  4 IF INKEY$="n" THEN GO TO 7
  5 IF INKEY$<>"y" THEN GO TO 4
  6 GO SUB 8000
  7 CLS
  8 LET hi=0
  9 REM u.d.g's data
 10 FOR n=USR "a" TO USR "k"+7:
READ a: POKE n,a: NEXT n
 15 DATA 60,52,62,60,8,28,31,60
 20 DATA 60,124,124,252,24,24,3
0,0
 25 DATA 4,12,56,124,84,124,56,
124
 30 DATA 254,254,56,56,28,12,4,
2
 35 DATA 28,42,62,28,8,62,73,93
 40 DATA 73,28,8,28,34,34,34,99
 45 DATA 56,124,254,130,170,146
,68,56
 50 DATA 0,62,62,62,28,8,8,28
 60 DATA 0,0,0,170,85,0,0,0
 70 DATA 0,0,96,246,240,246,96,
0
 75 DATA 60,124,124,252,120,204
,103,0
 99 REM initialisation
100 LET ay1=1: LET ay2=20: LET
ay3=1
110 LET ax1=16: LET ax2=22: LET
ax3=30
120 LET y=11: LET x=1
130 LET sc=0: LET li=3: LET d=7
: LET shot=0: LET screen=0
199 REM set-up screen
200 FOR f=1 TO 15: PRINT INK 3;
AT 0,f;"■";AT 21,f;"■"
210 NEXT f
220 FOR g=17 TO 21: PRINT INK 3
;AT 0,g;"■";AT 21,g;"■"
```

AIL

by W. Kerr

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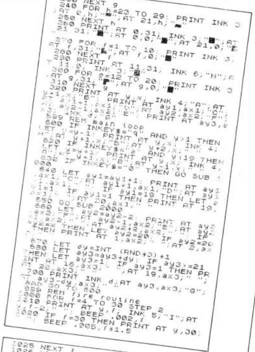
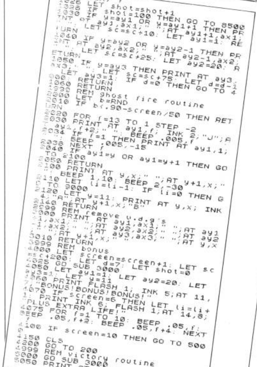
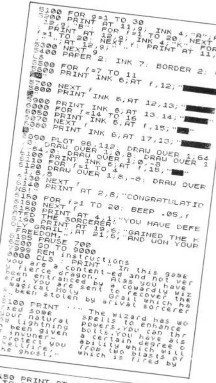


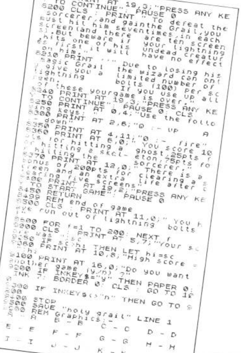
```
230 NEXT g
240 FOR h=23 TO 29: PRINT INK 3
;AT 0,h;"█";AT 21,h;"█"
250 NEXT h
260 PRINT AT 0,31; INK 3;"█";AT
21,31;"█";AT 0,0;"█";AT 21,0;"█"
270 FOR f=1 TO 10: PRINT INK 3;
AT f,31;"█";AT f,0;"█"
280 NEXT f
290 PRINT AT 11,31; INK 6;"H";A
T 11,0; INK 3;"█"
300 FOR g=12 TO 20: PRINT INK 3
;AT g,31;"█";AT g,0;"█"
310 NEXT g
320 PRINT AT y,x; INK 4;"A";AT
y+1,x;"B": PRINT AT ay1,ax1;"C";
AT ay1+1,ax1;"D";AT ay2,ax2;"F";
AT ay2-1,ax2;"E": PRINT AT ay3,a
x3; INK d;"G"
599 REM main loop
600 IF INKEY$="q" AND y>1 THEN
LET y=y-1: PRINT AT y,x; INK 4;
"A";AT y+1,x;"B";AT y+2,x;" "
620 IF INKEY$="a" AND y<19 THEN
LET y=y+1: PRINT AT y,x; INK 4;
"A";AT y+1,x;"B";AT y-1,x;" "
630 IF INKEY$="0" THEN GO SUB 1
000
640 LET ay1=ay1+1: PRINT AT ay1
,ax1;"C";AT ay1+1,ax1;"D";AT ay1
-1,ax1;" ": IF ay1=19 THEN LET a
y1=1: IF ay1=1 THEN PRINT AT 19,
ax1;" ";AT 20,ax1;" "
650 GO SUB 2000
660 LET ay2=ay2-2: PRINT AT ay2
,ax2;"F";AT ay2-1,ax2;"E";AT ay2
+1,ax2;" ";AT ay2+2,ax2;" ": IF
ay2<=3 THEN LET ay2=20: IF ay2=20
 THEN PRINT AT 1,ax2;" ";AT 2,ax
2;" "
670 LET dy=INT (RND*3)+1
680 LET ay3=ay3+dy: IF ay3>=21
THEN LET ay3=1: IF ay3=1 THEN PR
INT AT 18,ax3;" ";AT 19,ax3;" ";
AT 20,ax3;" "
700 PRINT INK d;AT ay3,ax3;"G";
AT ay3-dy,ax3;" "
800 GO TO 600
999 REM fire routine
1000 FOR f=4 TO 30 STEP 2
1010 PRINT AT y,f; INK 5;"I";AT
y,f-2;" ": BEEP .002,f
1020 IF f=30 THEN PRINT AT y,30;
" ": BEEP .005,f*1.5
```



```
1025 NEXT f
1026 LET shot=shot+1
1028 IF shot=100 THEN GO TO 8500
1030 IF y=ay1 OR y=ay1+1 THEN PR
INT AT ay1,ax1;" ";AT ay1+1,ax1;
" ": LET sc=sc+10: LET ay1=1: RE
TURN
1040 IF y=ay2 OR y=ay2-1 THEN PR
INT AT ay2,ax2;" ";AT ay2-1,ax2;
" ": LET sc=sc+25: LET ay2=20: R
ETURN
1050 IF y=ay3 THEN PRINT AT ay3,
ax3;" ": LET sc=sc+75: LET d=d-1
: LET ay3=1: IF d=0 THEN GO TO 4
000
1060 RETURN
1999 REM ghost fire routine
2000 LET b=RND
2010 IF b<.90-screen/50 THEN RET
URN
2020 FOR f=13 TO 1 STEP -2
2030 PRINT AT ay1,f; INK 2;"J";A
T ay1,f+2;" ": BEEP .005,f
2034 IF f=1 THEN PRINT AT ay1,1;
" ": BEEP .005,-15
2038 NEXT f
2040 IF ay1=y OR ay1=y+1 THEN GO
 TO 2100
2050 RETURN
2100 PRINT AT y,x;" ";AT y+1,x;"
": BEEP 1,10: BEEP 2,-30
2110 LET li=li-1: IF li=0 THEN G
O TO 9000
2120 LET y=11: PRINT AT y,x; INK
 4;"A";AT y+1,x;"B"
2140 RETURN
2999 REM remove u.d.g's
3000 PRINT AT ay1,ax1;" ";AT ay1
+1,ax1;" ";AT ay2,ax2;" ";AT ay2
-1,ax2;" ";AT ay3,ax3;" ";AT y,x
;" ";AT y+1,x;" "
3010 RETURN
3999 REM bonus
4000 LET screen=screen+1: LET sc
=sc+200: LET d=7: LET shot=0
4025 GO SUB 3000
4050 LET ay1=1: LET ay2=20: LET
ay3=1: LET y=11
4060 PRINT FLASH 1; INK 5;AT 11,
7;"BONUS!BONUS!BONUS!"
4070 IF screen=6 THEN LET li=li+
1: PRINT INK 6; FLASH 1;AT 14,8;
"PLUS EXTRA LIFE!"
4075 FOR f=1 TO 10: BEEP .05,f:
BEEP .05,f+2: BEEP .05,f+4: NEXT
 f
4100 IF screen=10 THEN GO TO 500
0
4150 CLS
4200 GO TO 200
4999 REM victory routine
5000 GO SUB 3000
5050 PRINT AT 11,7;"
```



```
5100 FOR g=1 TO 30
5200 PRINT AT 11,g; INK 4;"A";AT
 12,g;"B": FOR f=1 TO 20: NEXT f
: PRINT AT 12,g; INK 4;"K": FOR
f=1 TO 20: NEXT f: PRINT AT 11,g
;" ";AT 12,g;" "
5300 NEXT g
5400 PAPER 2: INK 7: BORDER 2: C
LS
5500 FOR f=7 TO 11
5600 PRINT INK 6;AT f,12;"█████
█"
5700 NEXT f
5800 PRINT INK 6;AT 12,13;"████
█"
5900 PRINT INK 6;AT 13,14;"███"
6000 FOR f=14 TO 16
6050 PRINT INK 6;AT f,15;"██"
6070 NEXT f
6080 PRINT INK 6;AT 17,13;"████
█"
6090 PLOT 96,112: DRAW OVER 1;64
,0: DRAW OVER 1;0,8: DRAW OVER 1
;-64,0: DRAW OVER 1;0,-8
6100 PRINT INK 6;AT f,15;"██"
6110 FOR f=1 TO 4
6120 DRAW OVER 1;8,-8: DRAW OVER
 1;8,8
6130 NEXT f
6140 PRINT AT 2,8;"CONGRATULATIO
NS!"
6150 FOR f=1 TO 20: BEEP .05,f
6160 NEXT f
6180 PRINT AT 4,1;"YOU HAVE DEFE
ATED THE SORCERER"
6190 PRINT AT 19,6;"GAINED THE H
OLY GRAIL";AT 21,6;"AND WON YOUR
 FREEDOM."
6195 PAUSE 700
6200 GO TO 9000
7999 REM instructions
8000 CLS : PRINT "  In this game
you are a content-ed and not ver
y fierce dragon. Alas you have
been entranced by a cowardly wiz
ard. You are sent to recover the
 magical Holy     Grail which ha
s been stolen by arival sorcerer
"
8100 PRINT ''"  The wizard has wo
rked some     spells to enhance
your natural  powers,you can thr
ow lightning  bolts.You have als
o been given  a certain degree o
f invuner-    ability which will
protect you   from two blasts of
hellfire,     which is fired by
the ghost."
```

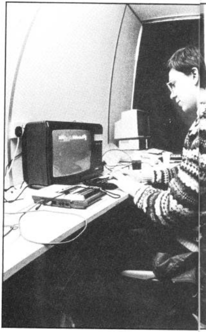


```
8150 PRINT AT 19,3;"PRESS ANY KE
Y TO CONTINUE": PAUSE 0
8200 CLS : PRINT "  To defeat the
 sorcerer,and gainthe Grail,you
must hit him seventimes,in each
screen(and there  are ten screen
s).But beware if  your lightning
 hits one of his  undead creatur
es first,it will  have no effect
 on him."
8210 PRINT ''"  Due to losing his
 magic Grail   the wizard can onl
y give you a    limited number of
lightning       bolts (100) per sc
reen.           If you use up all
 of these yourgame is over."
8240 PRINT AT 19,3;"PRESS ANY KE
Y TO CONTINUE": PAUSE 0: CLS
8250 PRINT AT 0,4;"Use the follo
wing keys:"
8300 PRINT AT 2,6;"Q :- up    A
:- down"
8350 PRINT AT 4,11;"0 :- fire"
8360 PRINT AT 6,0;" You score 10
pts for hitting a  ghost,25pts f
or hitting a skel- eton,75pts fo
r hitting the      sorcerer."
8370 PRINT AT 12,0;" There is a
bonus of 200pts for clearing a s
creen and an extra life after c
learing five screens"
8400 PRINT AT 19,2;"PRESS ANY KE
Y TO START GAME": PAUSE 0
8450 RETURN
8499 REM end of game
8500 CLS : PRINT AT 11,0;" You h
ave run out of lightning  bolts
"
8600 FOR f=1 TO 200: NEXT f
9000 CLS : PRINT AT 5,7;"Your sc
ore was ";sc
9050 IF sc>hi THEN LET hi=sc
9060 PRINT AT 10,8;"High score =
";hi
9100 PRINT AT 16,0;"Do you want
another game (y/n) ?"
9200 IF INKEY$="y" THEN PAPER 0:
 INK 7: BORDER 0: CLS : GO TO 10
9300 IF INKEY$<>"n" THEN GO TO 9
200
9400 STOP
9500 SAVE "holy grail" LINE 1
9600 REM Graphics:-
A - A     B - B     C - C    D - D
E - E     F - F     G - G    H - H
I - I     J - J     K - K
```

So much for the Sea of Tranquilit

BATTLE OF T

Lunar Jetman was the game chosen by the Chamber Master for this month's contest of skill, bravery and endurance. Many entries had been received, but two were outstanding: Richard Boud from Colchester with a highest score of 143,530 and Paul Reed from Hull who first sent an entry for 139,107 and then added another with a colossal score of 202,720. The Chamber Master just had to see these guys in action.



So they duly arrived in London, two tall and lean games-players, hungry for fame. Over a succulent lunch in one of the capital's top hamburger joints (courtesy of the Chamber Master) these gladiators of the micro revealed the secret of high scores – practice, and plenty of it.

They have plenty of time as they are both, at the moment, unemployed. Richard, who is 18, is taking a year off before going to university in, strangely enough, Hull. Paul, 21, is an ex sheet-metal worker and has been out of work for some time.

Richard has had his Spectrum for about a year. He uses it mainly for games, although he has learned Basic and is even writing an adventure. Apart from *Lunar Jetman* his current obsession is A & F's *Chuckie Egg* on which he claims a score of 320,000.

He likes all the Ultimate games and is also very impressed with Melbourne House's *Hobbit* even though, as he says, 'it infuriates me'. Still, he can take some comfort from having solved 95% of *Atic Atac*.

Paul hasn't even got a computer. As he puts it: 'I bought my girlfriend a Spectrum for Christmas, but she doesn't use it'. So of course, he does. He's certainly been putting in a lot of time on it. 'Sometimes I play all day', he says. You have to believe him when he tells you that he's solved 99% of *Atic Atac* and clocked up huge scores on *Manic Miner*. Another game that's intriguing him is Digital Integration's *Fighter Pilot*, although he complains of 'having problems landing'.

He's even less interested in programming than Richard, believing that home computers are good for games and not much else. But he wouldn't mind getting a QL 'when they come out properly'.

And so to the contest, where the Chamber Master saw two very different techniques on display. Richard is a no-nonsense keys man; no fancy peripherals for him. Paul, it seems, goes nowhere without his trusty joystick. Not only his joystick, but also an enormous metal hi-fi speaker stand on the top of which he strapped his Quickshot 2. This he positioned by his right leg, leaving his left hand free to use the keyboard.

Immediately a fundamental difference in approach was apparent. In *Lunar Jetman* you have an astronaut with a jet-pack, a lunar rover, and two teleporters to transport you from one side of the planet to the other. The object of the game is to destroy the enemy missile base and to fight off the myriad alien attackers. At regular intervals a missile is launched from the base and must be destroyed in mid-air or it's curtains for you.

It was in the destruction of this missile that the divergence in styles was most easily seen. Richard took the brave, or foolhardy, course of leaving the protection of his rover, dodging the aliens and waiting for the missile to arrive. It was spectacular to watch, but dangerous to play as he frantically manoeuvred out of the aliens' paths.

Paul, on the other hand, used the safer technique of teleporting across the planet until the missile was in range. In this way there was less danger of his own destruction.

So Richard was scoring more quickly,

SEND US YOUR RECORD SCORES

You too can achieve nation-wide fame by sending us your high scores on any popular game for any micro. Just fill in the form below.

But remember. You may be summoned to the Challenge Chamber to prove that your skills match up to your claim...

OK – I'll dare the Challenge Chamber

Name
Address
Telephone no. (if possible)
Game Machine
My record score is: scored on (date)
in a game lasting mins secs.
Signed
Here are my tips for playing this game well.

(This portion to be filled in by witness)

Name
Address
Telephone no. (if possible)
Occupation
I confirm that the above claimed score is genuine.
Signed

Post this form to Challenge Chamber, Personal Computer Games, Evelyn House, 62 Oxford Street, London W1A 2HG.

ility **when the jetmen duel on the moon**

THE BUGGIES

Richard Boud (left) pits two-handed keyboard prowess against Paul Reed's customized Quickshot ◄

Ordeal over, Richard and Paul emerge vindicated from the Master's domain ▼

Photography by Martin Shallcross

but living more dangerously. After five minutes he had 28,000 points but had already lost a life. Paul had only 20,000 points – but had not lost a life.

Ten minutes later there was the horrible sight of Richard's jetman running out of juice and desperately staggering back to his rover to refuel. He didn't make it, and Richard lost another life, his third. But he was still ahead on points; 110,000 to Paul's 79,000.

Then, only a few minutes later, Richard's penultimate jetman snuffed it. It seemed to knock the stuffing out of him because soon after, on 123,390 points, he died the ultimate death.

This left Paul with a clear run. Yet he too now had the last man in – but only 95,000 clocked up. The lack of competition must have upset him, for only a thousand points later he too had become extinct. Round one to Richard.

They both wanted a re-match, so who was the Chamber Master to argue? This time round, though, the tables were turned. Paul's patient technique paid off, while Richard couldn't really get going – he died on 105,000. Paul just kept going, right up to the magnificent total of 173,930.

But still neither player was satisfied with his score; They were both some way below their best. However this is only to be expected. The tension of the Challenge Chamber is so great that you cannot guarantee to match your best scores.

Both of these players, though, should be proud of their achievement. What the Chamber Master wants to know now is, when are we going to get a Wally of the Month?

Meet the megazappers!

REVENGE OF THE MUTANT CAMELS COMMODORE 64

★ 1,680,000	Tom Burton, Sweffling, Suffolk
★ 1,420,285	Steven Finlay, Kircaldy, Scotland
★ 1,111,630	Robert Ireland, Prestatyn, Wales

HUNCHBACK SPECTRUM

★ 3,467,000	Mark Johnston, Arbroath, Scotland
★ 3,230,600	David Ritchie, Glasgow
★ 2,234,200	Martin Abbott, Dover

GRIDRUNNER VIC 20

★ 309,820	Graham Fox, Manchester
★ 240,990	Peter Stanford, Manchester
★ 170,740	Simon MacCutchan, Southbourne, Dorset

MANIC MINER SPECTRUM

★ 11,310,613	Russell Owens, Malvern, Worcestershire
★ 7,500,214	Daryl Unwin, Camberley, Surrey

CHUCKIE EGG SPECTRUM

★ 402,000	Alan Taylor, Aberdeen
★ 364,460	Calum McMillan, Glasgow
★ 291,880	Andrew Cousins, Hull

PYRAMID SPECTRUM

★ 127,839	Robert Scarfe, Ipswich
★ 123,540	Gary Walker, London

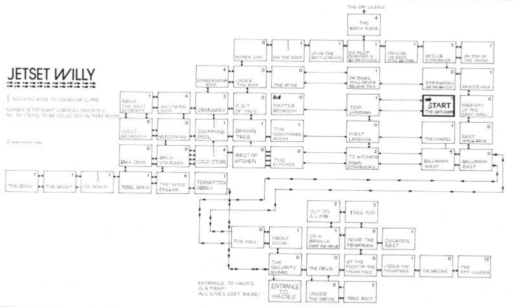
JET PAC VIC 20

★ 89,875	Andrew Anderson, Bath
★ 67,200	Andrew Robertson, Hull
★ 61,570	Andrew Wilson, Irvine, Scotland

Challenge Chamber

The Chamber Master considers the latest claims and presents Mark Henry's guide to the manic mansion

MAP OF THE MANSION


JETSET WILLY
INDICATES ROPE TO SWING OR CLIMB
NUMBER IN TOP RIGHT CORNERS INDICATES No. OF ITEMS TO BE COLLECTED IN THAT ROOM
© MARK HENRY 1984
THE OFF LICENCE
4 THE WATCH TOWER
0 NOMEN LUNI
1 ON THE ROOF
1 UP ON THE BATTLEMENTS
1 WE MUST PERFORM A QUIRKAFLEEG
1 I'M SURE I'VE SEEN THIS BEFORE
2 RESCUE ESMERALDA
1 ON TOP OF THE HOUSE
4 CONSERVATORY ROOF
0 UNDER THE ROOF
0 THE ATTIC
1 DR JONES WILL NEVER BELIEVE THIS
0 EMERGENCY GENERATOR
1 PRIESTS HOLE
1 ABOVE THE WEST BEDROOM
4 WESTWING ROOF
3 ORANGERY
0 A BIT OF TREE
0 MASTER BEDROOM
1 TOP LANDING
1 START THE BATHROOM
0 HALFWAY UP THE EAST WALL
0 WEST BEDROOM
0 WESTWING
1 SWIMMING POOL
1 BANYAN TREE
1 THE NIGHTMARE ROOM
0 FIRST LANDING
1 THE CHAPEL
0 EAST WALL BASE
0 BACK DOOR
0 BACK STAIRWAY
4 COLD STORE
0 WEST OF KITCHEN
0 THE KITCHEN
2 TO KITCHENS MAIN STAIRWAY
7 BALLROOM WEST
0 BALLROOM EAST
1 THE BOW
1 THE YACHT
1 THE BEACH
1 TOOL SHED
6 THE WINE CELLAR
1 FORGOTTEN ABBEY
2 OUT ON A LIMB
3 TREE TOP
0 THE HALL
1 FRONT DOOR
1 ON A BRANCH OVER THE DRIVE
0 INSIDE THE MEGATRUNK
1 CUCKOO'S NEST
0 THE SECURITY GUARD
0 THE DRIVE
0 AT THE FOOT OF THE MEGATREE
1 UNDER THE MEGATREE
0 THE BRIDGE
12 THE OFF-LICENCE
ENTRANCE TO HADES IS A TRAP! ALL LIVES LOST HERE!
ENTRANCE TO HADES
0 UNDER THE DRIVE
2 TREE ROOT

The flood of Challenge Chamber entries continues unabated. Every day a squad of postmen approach the Chamber Master's door, groaning under the weight of their bulging sacks. The Master's loyal servants patiently work through the forms, humbly bringing his attention to any noteworthy entries.

For instance, the first foreign entrant. One Mattÿs Wÿers of Zandwoortweg in Holland owns a Vic-20 and has scored 174,421 on Romik's *Martian Raider*. The Chamber Master was heartened to receive an entry from our partners in the Common Market. Unfortunately, Matthÿs was the only entry for this particular game and the Master suspects it would not be a good idea to have him come all this way to play off against himself. But if you try another game, Matthÿs you could get that thrilling summons to enter the Challenge Chamber.

From slightly nearer home came this wonderful map of the mansion in *Jet Set Willy*. It was supplied by Mark Henry from Dublin. However, despite being able to find his way right round the house, Mark is still a long way from collecting all the game objects. If you missed our last issue, you should be warned that entering the attic will cause the program to do funny things at other locations.

Chuckie Egg continues to attract many entries on both Dragon and Spectrum although the one from Paul Rivers of Oxford just goes to show that a high score is no guarantee of eternal bliss. Paul completed 'all 256 levels on *Chuckie Egg* and achieved a score of 5,100,360'. But is he happy? Not on your nelly. Because, he complains, 'it doesn't do anything, not even a congratulation ... It just goes back to the first screen and it isn't even any harder, and I wasn't going to spend another six hours doing it again'.

The Chamber Master sympathises, although he can't help feeling that a high score, like virtue, is its own reward. But perhaps software houses could do a little more for those players who complete a game.

That old favourite *Manic Miner* continues to keep the nation stuck to its micros, and the Master has been sent some truly awesome scores. The statistics speak for themselves. Russell Owens of Malvern: 11,310,613 in a game lasting 60 hours. When the Chamber Master spoke to Russell on the telephone he frankly admitted that this was not one continuous session, but was played over four nights using the pause facility. He says the only difficult screen is the solar power generator and advises us to keep the music switched off. The Master awaits his next entry with great anticipation. Daryl Unwin of Camberley in Surrey had a score that was almost as staggering; 7,500,214 in a game lasting 4213 minutes, which the Chamber Master's brain reckons is a little under 7 hours. He's not giving much away in advice, saying cryptically 'Practice'. Thanks a lot Daryl.

PCG's April Game-of-the-Month, *Forbidden Forest*, has already drawn an impressive entry. Carl Lyons of Huddersfield has a score 243,257 but, more impressively, has polished off three Demogorgons and only died on the fourth level.

So keep the entries coming. The Post Office will do their best and so will the Chamber Master's trusty minions. Nationwide fame, or derision as Wally of the Month awaits those with the guts to enter the Challenge Chamber. And if you don't have room on the entry form for tips, then write a letter. ●

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NEW

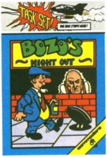
The complete deep space saga. A radical joystick action can bring inspired flexibility and a horrific kill-rate. The outstanding graphics include highly detailed craft and lots more than eight sprites at once. A full music and effects sound track accompanies the action. All these features combine with player options and a top 20 hi-score table to set new standards in hi-tech slaughter.

TASK SET!
THE BUG STOPS HERE!
GYROPOD
commodore 64

BOZO'S NIGHT OUT

NEW

A brand new character game. Poor old Bozo, all he has to do is to get home after a night out with the lads. That's easy until a wobble becomes a lurch and a stagger. Later into the night, all rules go out of the window as he disbelieves what's happening in front of his blood-shot eyes. An epic journey with ultra-smooth graphics and sprites which run rings round normal games.



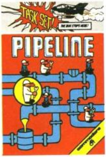
All available now on cassette or disk.

SUPER PIPELINE

Keep the pipeline open. Foreman Fred and Plumber Pete have their work cut out. The evil ladderman drops metal wedges to plug the pipeline – and only Pete can fix 'em. Pete trusts Fred to defend him against the six-legged Venusian pipe spiders and the hard case lobster while he knocks out the plugs and restores the flow. Full accompanying music and effects, options and hi-score table.

JAMMIN'

Unlike anything else, a totally musical game yet highly colourful. Guide Rankin' Rodney through the top 20 mazes – each with an interactive rock sound track. Gather the instruments and make a band but watch out for bum-notes, dischord and that most deadly effect – distortion. If you've never heard the full music capabilities of the 64, grab an instrument and join the band.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PIPELINE
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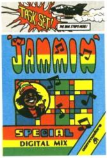

TASK SET!
THE BUG STOPS HERE!
COSMIC
CONVOY
commodore 64

COSMIC CONVOY

Just surviving is not good enough in this giant convoy. Control three fighters at once, to defend the huge transporters as they ply between the planets. Only those transports reaching planetfall will gain galactic credits, and no-one expects promotion for losing the entire fleet. Which freighters must be sacrificed to get most cargo to the next planet. Full sound options and hi-score table complete the arcade package.

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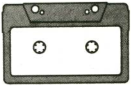
cassette



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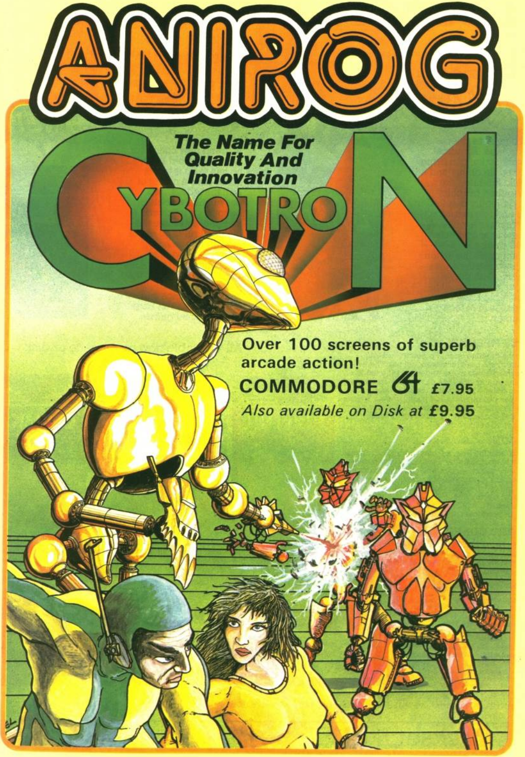
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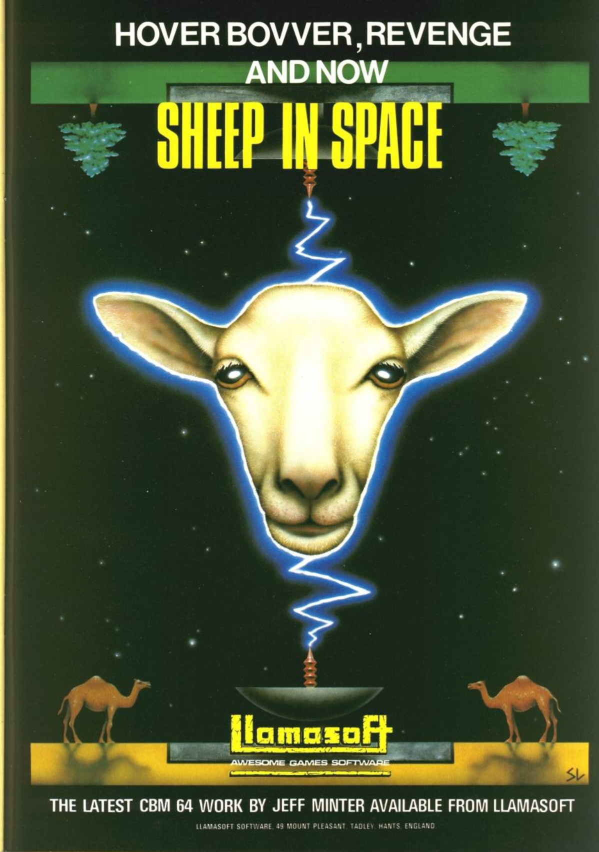

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ADVENTURES IN COLOUR

What price graphics? Don't kid yourself. One way or another you'll have to pay for them. First, graphics can take up a lot of memory. Fans of text-only games argue that the space is better used for a larger vocabulary or better location descriptions. What's more, they point out, the pictures take a long time to draw and conflict with the image in the player's imagination.

Do the text-only supporters have a point? Or should they stick to reading books and playing Scrabble?

Recent adventures, it seems, have overcome most of their objections. As far as memory is concerned, you might like to know that Bug-Byte's very successful ***Twin Kingdom Valley*** has over 175 locations, each with its own picture, but, incredibly, the graphics take up only 8K.

'It's a very crafty coding system,' says Trevor Hall, programmer of *TKV*, obviously unwilling to give away any secrets. What's more, the graphics draw in under 10 seconds and some even boast the occasional animated sprite.

Other software companies, however, seem to be going in quite a different direction. Interceptor Software recently brought out ***Heroes of Karn*** for the Commodore 64, a game with only 65 locations that takes up all the available memory, a large part of which is dedicated to graphics.

One look at them will tell you why. The detail of the display is fabulous and some of the locations have excellent music as well. The graphics are very slow to draw, but – although the Text-Only Supporters Club will no doubt disagree – I think they're worth waiting for and add substantially to the atmosphere of the game.

Heroes of Karn was reviewed in the March issue of PCG, so all I'll say here is that it's a great adventure and well worth adding to your collection.

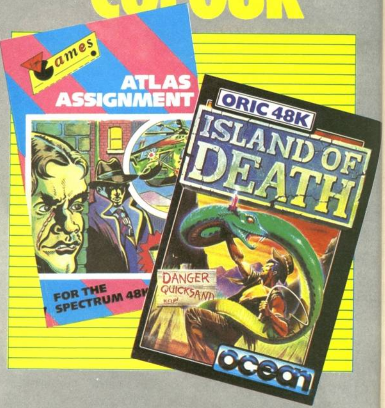
Meanwhile most of the more recent adventures on the market are offering graphics, while some of the older, text-only games are being re-released with graphics added.

Into this last category falls Adventure International, distributor of the Scott Adams adventures. These games have been around for quite a while now, but they've come a long way since Scott first hammered them out on his 16K Tandy.

Four of the titles, already available in text-only form on the BBC, are about to be released with graphics for the Spectrum and Commodore 64. If you haven't tried the Scott Adams series then they're well worth sampling. ***Pirate Adventure*** is one of the simplest, but try ***Adventureland*** if you enjoy a challenge.

Scott's commitment to graphic adventures is most clearly shown by his latest offerings, based on heroes from the Marvel Comics. ***The Incredible Hulk*** has just come out for the Atari, Spectrum, BBC and Commodore 64.

Catching a quick glimpse of some pre-release versions a few weeks ago, I can assure you that the graphics are excellently done, and the games have some amusing and original touches. Design was carried out in collaboration with Marvel artists so authenticity is guaranteed. I'll be looking at these games in more detail in the next issue.



BBC owners have been known to turn a little green at the sight of graphic adventures. That's because they're usually running on someone else's machine. Sadly the BBC doesn't quite have the space inside for all those pretty pictures, as anyone who's tried playing *The Hobbit* on the Acorn machine will know to their cost.

Good news, then, for BBC owners. Micrograf have just released two games for the Beeb that make unusual use of graphics. ***Flint's Gold*** and ***Vampire Castle*** are predominantly text-only, but each program has occasional graphic interludes. It's a bit like reading a book with an illustration in each chapter. Because of excellent use of sound effects, varied responses, and a great sense of humour, Micrograf's games score very high on atmosphere.

As you walk along the sea-front in *Flint's Gold* you hear the waves breaking on the shore and even the sound of gulls calling out overhead. *Vampire*

Castle brings you face to face with Count Dracula, Igor, and a number of tricky puzzles.

Neither of these games is a full-blown graphic adventure by any means, but the occasional 'illustration' and the sound effects add a lot of fun.

Beeb owners who insist on graphics at all cost might be tempted by ***The Stolen Lamp*** from Lothlorien. The display is colourful and draws very fast, but the game itself is repetitive and lacking in challenge. If you fancy flying round deserts and blowing up pickpockets in a search for Aladdin's Lamp then you might be able to put up with the extremely limited vocabulary and sparse locations. My own inclination would be to avoid it except in cases of dire software starvation.

Adventure in a very different style for Beeb owners is offered by ***Pettigrew's Diary*** from Shards Software. This is billed as a three-part adventure, and the first 'chapter' certainly isn't short on graphics. Unfortunately it's very short on text, and there are only two locations. Yes, you guessed, it's really an arcade game.

The idea behind *Pettigrew's Diary* is to get through the first part collecting various objects and the password to the next 'chapter'. Unfortunately the action is so agonisingly slow that it was all I could do to keep playing. I spent no less than five hours struggling with the game, in which you guide a little man round a burning farmhouse looking for various objects and avoiding the ever-spreading flames.

Once you've completed the first chapter you move on to the second, which is a more traditional text-adventure with standard two-word inputs. The third 'chapter' involves you undertaking eight separate challenges in order to solve the secret of *Pettigrew's Diary*.

Whether the later stages of *Pettigrew's Diary* are worth all the effort at the beginning is a mystery to me since I never got beyond the first stage. For this reason I haven't included a rating of the game, but if any reader wants to write in and give us all the low-down on what happens then please do.

If you fancy arcade/adventure combinations and you have a Commodore 64 then you should try ***Sorcerer's Apprentice*** from Phoenix Software. Here you must first battle it out against mad mops and brushes in order to discover a password that will enable you to play the adventure that follows.

The adventure, however, is text-only. You wander about the Wizard's Castle experimenting with spells and, if you're not careful, find yourself turned into a toad or poisoned by biscuits. Once you get tired of this, *Sorcerer's Apprentice* doesn't have a lot more to offer. The only really good thing about the game is the error-checking, which is just as well as the vocabulary is very small.

Graphics adventures for the Oric are few and far between. To make up for this, some of them seem to make extravagant claims for themselves which they then fail to live up to.

Island of Death from Ocean has you wandering round a desert island using single letter commands. Each time you encounter an obstacle the program launches into a graphic interlude that takes the form of a simple arcade-type challenge.

The graphics are very basic and none of the challenges really tests the player. Despite some humourous moments this game is definitely not the 'ultimate Arcade/Adventure' it claims to be.

Hell's Temple from Kenema is a straightforward 3D maze game with D & D elements. You can listen outside doors, battle with monsters, and collect treasure. Like *Island of Death* it uses single-letter inputs and claims to be 'one of the most advanced Adventure programs for the Oric 1'. It isn't.

Don't be discouraged, Oric owners. As soon as the confusion caused by the Oric/Atmos transition has died down I'll be looking at adventures for your machines in more detail.

Finally, a quick look at a couple of new releases for the Spectrum. Hewson Consultants' ***Fantasia Diamond*** is a graphic adventure with many similarities to *The Hobbit*, though it isn't so complex.

The display will be familiar to *Hobbit* fans, with the picture in the top half of the screen and input/responses in the bottom half. The graphics aren't quite as good as the Melbourne House program and they're rather slow on the draw. ▶

Adventure ratings

GAME	MACHINE	PRICE	COMPLEXITY	ATMOSPHERE	INTEREST	VALUE
HELL'S TEMPLE	ORIC 48K	£12.00	3	3	2	3
ISLAND OF DEATH	ORIC 48K	£6.90	2	4	1	2
HEROES OF KARN	COMMODORE 64	£7.00	7	8	6	7
STOLEN LAMP	BBC	£6.95	4	4	3	3
SORCERER'S APPRENTICE	COMMODORE 64	£9.99	4	5	4	4
TWIN KINGDOM VALLEY	COMMODORE 64 ELECTRON BBC	£9.50	8	8	6	7
FLINT'S GOLD	BBC	£6.95 CASS £9.95 DISK	6	8	4	7
VAMPIRE CASTLE	BBC	£6.95 CASS £6.95 DISK	6	8	4	7
ATLAS ASSIGNMENT	SPECTRUM 48K	£5.95	7	7	5	6
FANTASIA DIAMOND	SPECTRUM 48K	£7.95	6	6	7	6

ADVENTURE NEWS · ADVENTURE NEWS ·

Severn unleash mummy's curse

Severn Software are releasing the *Mystery of Munroe Manor* for the Commodore 64 at £8.50. It offers split-screen graphics, 70 different illustrations, (some of which are animated), and an intriguing scenario. Lord Munroe has returned from Egypt and promptly disappeared. As a young reporter you must investigate.

Magra returns

Carnell Software are still battling with *The Wrath of Magra*. They've been advertising it for some time now, so they'll soon be facing the wrath of their customers, but it should be available by the time you read this.

The Wrath of Magra looks very promising, with 120K of program in three different sections. There's also a 200-page book included in the package which changes hands for £12.50.

Following on from the *Black Crystal* and *Volcanic Dungeon*, your task is to seek out and destroy the evil Magra once and for all.

Mob rule from Melbourne House

Melbourne House have had to delay the release of *Sherlock Holmes*, but it should be available in June. Meanwhile they're bringing out *Mugsy*, which they describe as 'the first inter-active computer comic strip'.

Mugsy (that's you, by the way) is a Godfather-style gangster who must rule Chicago by force or otherwise, and avoid attempts on his life for as long as possible. The graphics look promising and if someone does try to kill you the program launches into an arcade-style sequence. *Mugsy* costs £6.95.

Chamber of Horrors

Digital Fantasia are forging ahead with their *Mysterious Adventures*. The eleventh game in the series is called *Waxworks* and has you falling asleep in a waxworks museum. What happens next I hate to think, but you can find out for £9.95 if you've got a BBC, Spectrum, or Oric/Atmos.

The best thing about this game is the other characters in the story, each of whom will help or hinder you in a particular way as you search for the stolen Fantasia Diamond. You can speak to them (using the 'say to' format) and even get them to do things for you, provided they're willing to.

The error-checking is good, and the vocabulary comprehensive. You'll have to persevere with some of the puzzles – even when you know the answer the program is very fussy about how you phrase it.

Virgin's ***Atlas Assignment*** is for the most part text-only, but includes three arcade sequences. If that isn't enough for you (and I warn you that it won't be) then you'll be pleased to know that the adventure itself isn't at all bad.

Some of the puzzles are very tricky to solve, and my only objection to the game was that it encouraged a rather homicidal approach to other people. Shoot them on sight, in other words. That said, *Atlas Assignment* has some novel ideas and looks like being one of Virgin's better games. ●

This month's helpful hints

Here are this month's tips, carefully concealed in the PCG Help Grid.

Just in case you missed last month's issue, you should note the code printed at the end of each problem. The first part is the co-ordinate of the first letter of the clue, the second part tells you which letters to read after that. A 2 after the comma would mean that you should read every second letter, a 3 indicates every third letter, and so on.

When you reach the end of a row go back to the beginning of the next one and carry on. If you reach the bottom of the grid, start again at the top. And if all THAT's too difficult for you, start playing arcade games instead!

1. Feeling lonely in *Heroes of Karn?* Beren is good company – if you can find him. This tip might help. (Clue Code C3,2)
2. Bear this in mind if you're looking for a way to kill the Dragon in *Twin Kingdom Valley.* (Clue Code G2,2)
3. Stuck on a ledge in Digital Fantasia's *Arrow of Death* Part 1? Take to the skies with this quick command. (Clue Code B2,2)

	1	2	3	4	5	6	7	8	9	10
A	T	H	I	S	I	S	I	D	I	S
B	A	P	E	L	T	U	R	C	K	K
C	Z	F	S	E	H	A	O	T	W	H
D	S	E	O	R	M	S	E	T	A	P
E	F	M	F	R	E	S	C	P	T	S
F	I	D	O	W	N	A	T	R	O	T
G	Y	T	O	H	U	E	R	W	A	E
H	N	A	I	P	M	O	A	N	L	L
I	F	O	R	O	I	K	E	S	N	D
J	D	E	S	A	N	D	A	L	E	Y

Help for hobbits

Melbourne House have just brought out a 75-page guide to playing *The Hobbit.* If you're still tearing your hair out in the Goblin's Dungeon, or just want to get more out of the program, then this looks as if it could be a good buy.

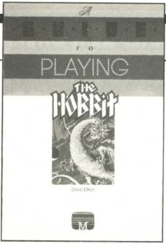
'A Guide to Playing *The Hobbit*' is beautifully produced with numerous screen-shots from the game. The book is divided into three sections – an introduction, help section, and a guide to locations.

Unfortunately the introduction doesn't tell you much that you won't find out by reading the instructions that come with the program and playing the game. By the time you're ready to fork out £3.95 for the book you'll probably already have found out that Thorin is useless in the second half of the game and that attacking Gandalf is not a good idea.

The second section isn't much better and gives only some rather obvious hints, but the final part of the book is more impressive. Almost all the locations are listed, together with the appropriate commands to enable the player to get out of most difficulties.

Dragon owners might like to browse through **'Creating Adventure Games on your Dragon 32'** by Clive Gifford. Just out from Interface Publications at £4.95 this book takes the reader through three adventure listings, each one slightly more complex than the last.

At the beginning of the book the author points out that he has included comprehensive REM statements in the programs, and goes on to say that 'you should easily be able to glean all that you need to know about the programming from the listing'. The programs are well annotated however and you don't need a degree in computer science to follow them through.



My main reservation with this book is that if you are already familiar with Basic then you won't learn much that you don't know already. On the other hand, if Basic is still Greek to you then you won't be able to make much sense of what's going on. However there are some useful tips on setting up locations, using arrays, and other Basic routines.

The only other drawback with this book is that once you've typed in the listing you'll almost certainly be able to solve most of the puzzles!

'A Guide to Playing The Hobbit', Melbourne House, Church Yard, Tring, Herts 5LU

'Creating Adventure Games on Your Dragon 32', Interface Publications, 9-11 Kensington High Street, London.

The Wizard's Mailbag

Judging by your letters *The Hobbit* still holds the attention of the nation's adventurers. Graeme Muir of Clydebank in Dumbartonshire was a little peeved when, after being congratulated for finishing the adventure with (he thought) 100%, he was told: 'You have mastered 2.5% of this adventure'. 'Perhaps someone can tell me why this is the case?' he asks. I certainly can't, Graeme, but if anyone else has the answer, let's hear from you.

Other *Hobbit* fans included Paul Sellers (75%) and Daniel Gilbert (100%). Mr Gilbert also has the distinction of being the first person to write in claiming 1,024 points on *Twin Kingdom Valley,* for which he was rewarded with the 'Secret of Life'. I only hope it was something more interesting than '42'. Are there any other TKV champions out there?

Mention of *Twin Kingdom Valley* brings me to this month's hints section. Nicholas O'Reardon telephoned the PCG Hotline in desperation wanting to know 'how to find the treasure, kill the Witch, and kill the Dragon'.

Steady on there, Nicholas, we can't give away all the secrets, but you should ponder the clue given opposite in your struggles with the Dragon. Help with other puzzles in *TKV* may follow in subsequent issues.

Meanwhile keep the letters flooding in. Any suggestions as to what you'd like to see on these pages will be especially welcome. The White Wizard is at your command.

Next month's mysteries

The July issue looks like being a bonanza for adventure fans. There'll be a special feature on how to write your own adventures – with no knowledge of programming whatsoever!

If that's not enough for you, I'll also be wrestling with Scott Adam's Superheroes, and bringing you the latest and best from the darkest locations of *Adventureland.* In the meantime WAIT, LOOK, and LISTEN – you never know when a vampire's creeping up behind you!

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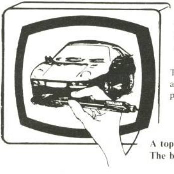

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The computer software for the game is to be designed via a London-wide competition which is open to all *non-commercial* entrants. Software for BBC Model B or Sinclair Spectrum computers will be accepted. The judges for the competition will be GLC members. All entries must be received no later than 8 June 1984.

For further information including a complete set of instructions plus the game's specifications, please phone: Pam Nanda, Ethnic Minorities Unit, 633 4273 or Patricia Devine, Central Computing Services, 633 3348; or write to: COMPUTER GAME COMPETITION Greater London Council, Director-General's Department (DG/EMU), Room 686, County Hall, London SE1 7PB.

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Competition

PCG and Spectrum computer stores offer five dream prizes for Commodore 64, Spectrum, BBC, Vic 20 and Dragon owners

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Here's your chance to win a large box of fabulous computer games. Each box contains no less than 30 tapes and we're giving away five – one each for Spectrum, BBC, Commodore 64, Vic 20, and Dragon.

These superb prizes worth around £200 each have been supplied by the SPECTRUM nationwide chain of computer stores. As well as selling all the main home computers and add ons, they also stock large quantities of software. Look at the lists on this page to see the amazing games prize-winners will get. (Some titles may be substituted depending on availability.)

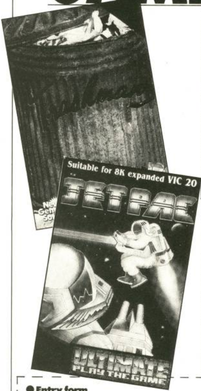
To enter this competition, all you have to do is to name the five games which you think are the best on YOUR micro. You can choose any games, not just those included in the prize-lists. Using the entry form printed below, you simply write your favourite games in order, placing the one you think is best at number 1, the 5th best at number 5.

We will use all the competition entries to work out which five games are in fact the most popular for each machine. Then, taking one machine at a time, we shall look for the person who came closest to naming these five most popular games in the right order. That person will win the box of games for his machine. In the unlikely event of a tie, the box will be divided.

Winners will be given their prizes by their nearest Spectrum store. So get thinking, and win yourself months of free entertainment.

● Rules

1. The competition is open to everyone except employees of VNU and Spectrum. 2. Any number of entries can be made, but they must be submitted on the official entry form printed on this page. Photocopies are NOT acceptable. 3. Entries must reach Personal Computer Games by first post on June 30th, 1984. 4. The editor's decision is final.



COMMODORE 64 GAMES

Acos +
Cybotron
Zodiac
Revenge of the Mutant Camels
Attack of the Mutant Camels
Kong
Skramble
Quest of Merravid
Forbidden Forest
Ant Attack Challenge
Solo Flight
Pyramid
Harrier Attack
Splat!
Omega Run
Ulti-Style
Super Pipeline
Jammin'
Super Blitz
Open Sesame
ACL
Snooker
Hungry Horace
Twin Kingdom Valley
Snowball
Lords of Time
Siren City
Dinky Doo
Megahawk
Depth Charge

DRAGON 32 GAMES

Kriegspiel
Pedro
Hungry Horace
Uggh!
Leggit
Up Periscope
Trace Race
Morris Miner
Bonka
Chess
Transylvanian Tower
Mined Out
Vultures
Cyberman
Dragrunner
Calixo Island
Madness and the Minotaur
Selection of Games 1
Selection of Games 2
Dragon Mountain
Flag
Final countdown
Mansion of Doom
Shark Treasure
Poseidon Adventure
School Maze
Alkatraz 2
Space Shuttle
The King
Defence

VIC 20 GAMES

Chariot Race
Pinball
Bonzo
Hellgate
Metagalactic Llamas
Matrix
Gridrunner
Lazer Zone
Mower Mania
Cosmonauts
The Wizard and the Princess
Space Joust
Jet Pac
Kong
Falcon Fighter
Snooker
Skyhawk
Tornado
Arcadia
Bewitced
Skramble
Dark Dungeons
Fire Galaxy
Battlefield
Quest of Merravid
Wacky Walters
Catcha Snatcha
Amok
Practicalc
Rat Race

SPECTRUM GAMES

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Night Gunner
Atic Atac
Jet Pac
Blue Thunder
Jet Set Willy
Psytron
The Hobbit
Confrontation
Scuba Dive
Time Gate
Penetrator
Code Name Mat
Trashman
Hungry Horace
The Quill
Fred
3D Ant Attack
Tribble Trouble
Lunar Attack
Eskimo Eddie
Pogo
Krakatoa
Chuckie Egg
Halls of the Things
Supertalk
Lords of Time
Colossal Adventure
Classic Adventure
Manic Miner

BBC GAMES

Eagle's Wing
Spooks and Spiders
747 Flight Simulator
Screwball
Vortex
The Hobbit
Beeb Art
Music Processor
Dare Devil Dennis
Snooker
Vu-Calc
Vu-File
Aviator
Fortress
Penguin
Twin Kingdom Valley
Lords of Time
Dambusters
Transistors
Gorf
Legion
Pedro
Sprite Master
Apocalypse
Voodoo
Secret mission
3D Space Ranger
Chuckie Egg
Hunchback

● Entry form

Name ....Age....................

Address ....

....

....Post code........................

My machine is (circle one) Spectrum, Commodore 64, Vic 20, BBC, Dragon. I think the best five games for my machine are (in order):

1. ....
2. ....
3. ....
4. ....
5. ....

Filling in the rest of this form will help us in planning future issues of PCG. Your answers will NOT be taken into account in judging the competition.

Please give ratings from 0 to 10 for each of the sections in this issue of PCG. 0 = couldn't be worse. 10 = couldn't be better.

Notice Board (p19) ...
Buzz (p20) ...
The Final Conflict (p28) ...
Chess (p36) ...
Screen Test (p45-80) ...
The ABC of Invaders (p84) ...
Program Library (p88) ...
Challenge Chamber (p100) ...
Adventureworld (p106) ...
PCG Hotline (p115) ...
Good Buy (p116) ...
Book Test (p123) ...
Puzzles (p144) ...

How could PCG be improved?..................

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What are your favourite computer magazines (in order)?

1. ....
2. ....
3. ....
4. ....
5. ....

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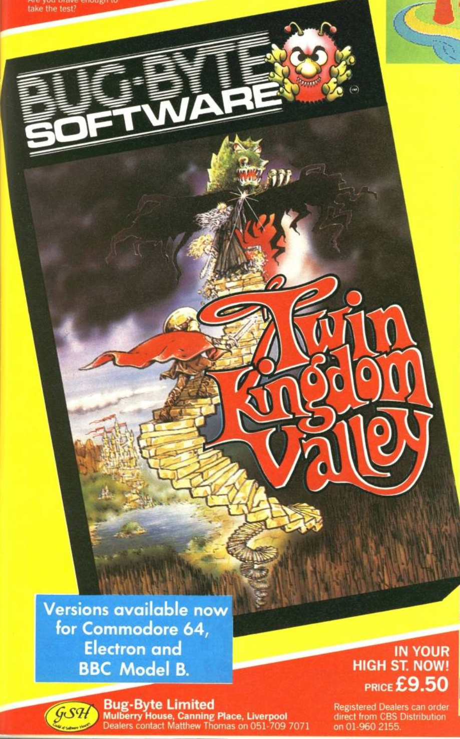

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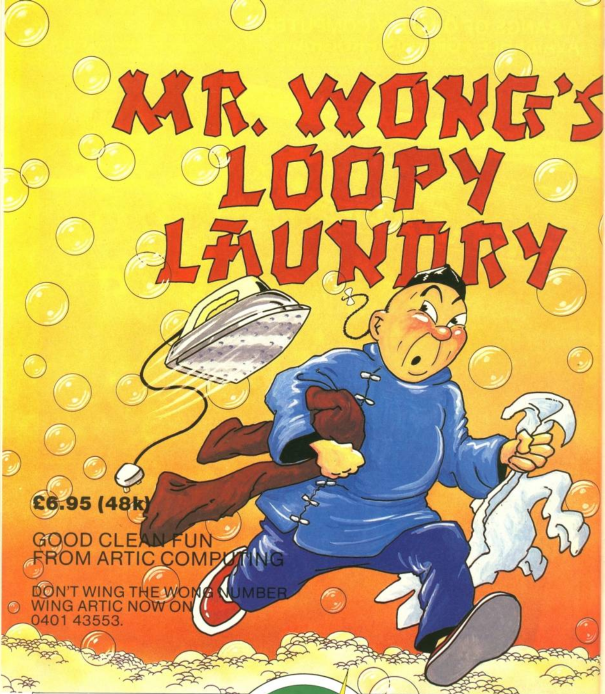

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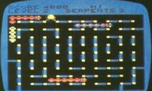

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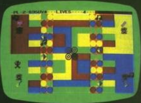

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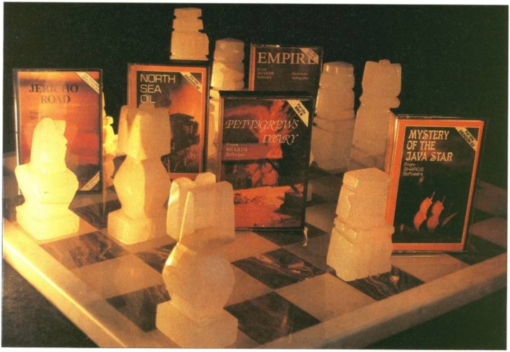

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Commander Chance reveals your comments on rubbishy programs

THE GREAT GAMES RIP-OFF

This is Commander Chance speaking.

Most of you dialled the Hotline in fury to complain about rip-off games. I'm taking you at your word, and right now software houses across the country are trembling with fear. If I find them guilty, it's the BIT BLASTER for them. There is NO ESCAPE!

First blood to Richard Parker of Crosshope in Herts, who phoned in to let off steam about *Cavern Run* and *Crazy Kong* from Bubble Bus.

One quick warp-drive over to Bubble Bus soon sorted *that* out. To start with, Richard, whoever charged you £5.95 was pushing his luck – Bubble Bus say the program should have been on sale at £3.99. However, they're going to try and get hold of you over the phone, and perhaps offer you some sort of compensation.

In fact *Cavern Run* was one of the very first games available for the Commodore 64. As Bubble Bus themselves admit, there are a lot of better games around now, and they've very properly withdrawn *Cavern Run* from the market.

Shaun O'Brien from somewhere in Scotland bought a game called – wait for it – *Crash*. No prizes for guessing what happened when he loaded it. Back to the shop, but refund refused.

Well Shaun, even though I've spent most of my life on other planets, I do know that on Earth that just happens to be against the law. Take that tape back to the shop again and say it isn't fit for the purpose for which it was sold. You are legally entitled to a refund.

Christopher Allman from Oxford had a problem of a rather different nature – and a much more expensive one. He disconnected his Currah Microspeech unit from his 48K Spectrum, and was horrified to see the display crash out – permanently.

However, in this case, Christopher was luckier than most. The shop did give him a replacement – a 16K machine only, which also broke down. Ten weeks later and still without a machine.

I should point out though, Christopher, that in this case the fault may have been yours. You should never remove a peripheral from any computer (and especially from the Spectrum) while the power supply is attached. What's more, Currah tell me that just such a warning was printed on the instructions accompanying the speech unit.

Now for this month's Hall of Wallies. If you don't know what that is, then start shaking. Every once in a while someone phones with a complaint that the Commander thinks is quite unjustified. The guilty parties will not be bit blasted – after all we do believe in freedom of speech around here – but ... well ... need I say more?

This month it's Benjamin Wheeler and Geoffrey Ward. Benjamin has got it in for *The Wizard and the Princess* and Geoffrey wants to knock the stuffing out of Rabbit Software for producing *Paratroopers*, which he dares to call a 'terrible game'.

Both these programs are for the Unexpanded Vic 20. Well come on lads, what do you expect from 3.5K? These two games happen to be some of the best around for the Unexpanded Vic.

Paratroopers has hi-res graphics and sound plus a perfectly playable game. It was even number 1 for the Vic 20 in the US charts. Give it a chance, or go out and buy more memory. Same goes for you, Benjamin. *The Wizard and the Princess* may not be as good as *Atic Atac*, but then it doesn't have 48K to play with.

Other callers this month included Terry McCartney of Edinburgh and Jonathan Lamb from Northern Ireland, both Atari owners. Jonathan wanted to know why Atari Software was so expensive. That's just the way the cookie crumbles, Jon – if you want cheap software, stick to British computers. As for you, Terry, I don't know what's going on in your *Pac-Man* game, but it sounds highly dangerous. If you keep on playing it, it could drive you mad. If I were you I'd take it back to the shop.

One last word, fellow gamesters. If you phone Commander Chance, speak clearly, or forever hold your peace. Even the Ultrasonic Voice Digitiser has problems sometimes when it has to cope with people who speak with a llama in their mouths. If you want me to take up your cause, let me know who you are, and give your full address and telephone number.

'I'm calling about a right con of a game. It's called *Cavern Run* by Bubble Bus. What it's got is – I think it's a V as a spaceship and you have to go into these X's. You've got these fuel things which are S's. It's supposed to be in machine code, and I bought it for £5.95. It shouldn't be allowed.'

Richard Parker, Walton Cross, Herts

'I went for a holiday on the Isle of Wight and bought a game called *Crash*, and the program actually crashes and doesn't load. I took this program back to the shop and this man won't exchange it.'

Shaun O'Brien, somewhere unpronounceable, Scotland

'I would like to complain about one of the games which I have bought. It's called *The Wizard and the Princess* and it's really boring. It's nothing like what it's supposed to be. It's in Basic, easy to save, and it's really boring to do.'

Benjamin Wheeler, Sutton Crawford, West Midlands

'I bought *Dragon Invaders* and it said coming-down invaders on the box. When I played the game, they didn't come down! And when I took it back they said I couldn't.'

Patrick Parsons, London

'The game *Paratroopers* – the box was really good and the adverts really good – but when I bought it ... graphics, no, game, no, anything, no – it's such a poor game. I'd love to get on to Rabbit.'

Geoffrey Ward, Stoke-on-Trent

'I bought this cassette called *Catcha Snatcha* (from Imagine). It's about Barry Bootlace, a store detective. It's really rubbish, it doesn't really show you about the shop or anything.'

Ian Stewart, West Lothian

Commander Chance goes into action again next month ... bug blasting. When did YOU last find a bug in a program? Did it drive you mad? Did it ruin the game? Did it enable you to get huge scores? Did it leap from the screen, rush across the sitting-room carpet and swallow the sofa? Now's your chance for revenge – dial the PCG Hotline on 01-636 5911 and tell the Commander all about it. Remember to speak clearly and to leave your name, address, and phone number.

Looking for a new game? Check

GRE

You'll find this section invaluable if you're trying to decide which games to buy for your micro. Like everyone else, you've probably been overwhelmed by the vast number of programs to choose from. And the fact is that while some games on offer are truly brilliant, others are a rip-off. You can't decide simply by looking at the cassette cover.

What we've done is to look at the entire range of games available and come up with some which we can whole-heartedly recommend. A considerable number of people have been consulted in drawing up these lists, and we shall constantly be updating them as new games come on the market.

Also each month we take a game from these charts and give it special treatment as our 'Screen Classic'. We give it a page to itself in which we explain what makes it a good game.

The games listed below are not in any special order. Those at the top of the lists are not necessarily any better than those at the bottom.

● NEWCOMERS START HERE

Baffling isn't it? All you did was get a computer to have some fun on, and people expect you to speak an entirely different language. We'll try to help out.

Computer games come in many different types, but these can be divided into a few broad categories.

The most common are ARCADE games. These aren't just games that you see in the arcades, but any game in which you use the computer keyboard (or a joystick) to control directly the movement of characters or objects on the screen. Arcade games themselves fall into several different categories (see below).

Then there are ADVENTURE games. The main difference is that to get things to happen you have to actually type in instructions rather than just press a key to go left or right. This means that adventures proceed at a slower pace. Their challenge is to do with brain-power, not finger-power, and a good one can keep you occupied for months.

In recent months, the dividing line between adventure and arcade games has been blurred, with pictures and even moving pictures being introduced to adventures, and arcade games being written on adventure themes.

Then there are STRATEGY games. Examples of these include games in which you control the fortunes of a country at war. The program might present the player with maps and statistics from which he will have to make his decisions.

MICRO CLASSICS

● **SCRAMBLE** Pilot your ship over mountains through caverns and around skyscrapers, avoiding missiles and meteors.

● **DEFENDER** Fast-moving space game in which your ship does battle with all manner of aliens.

● **ASTEROIDS** Destroy asteroids and alien craft using a highly manoeuvrable ship.

● **FROGGER** Guide the frog across busy roads and crocodile-infested rivers.

● **GALAXIANS** Development of *Invaders*, with the descending aliens cloning and wheeling off to the sides.

● **DONKEY KONG** Climb ladders and jump over obstacles as you attempt to rescue the damsel from the clutches of the nasty gorilla.

● **PAC-MAN** Exciting maze game; eat the monsters or be eaten.

● **MISSILE COMMAND** Protect your cities from the invaders by laying a protective covering of missile fire.

● **SPACE PANIC** Defeat the monsters by bonking them on the head and knocking them through the different levels.

● **CENTIPEDE** Blast the centipede, which splits up as it drops down on you.

● **Q*BERT** Colour the blocks on a 3D pyramid while avoiding vicious springs and monsters.

● **PENGY** Slide ice-blocks and use the electrified fence to kill off the Snow Bees.

BBC GAMES

TITLE	PRICE	SUPPLIER	COMMENT
Planetoid	10.00	Acornsoft	The definitive version of *Defender*
Arcadians	10.00	Acornsoft	An excellent version of *Galaxians*
Meteors	10.00	Acornsoft	Probably the best version of *Asteroids* for any micro
Snapper	10.00	Acornsoft	A fine version of *Pac-Man*
Rocket Raid	10.00	Acornsoft	A fine version of *Scramble*
Starship Command	10.00	Acornsoft	Space game with revolving ship and fragmenting aliens
Hopper	10.00	Acornsoft	Superb version of *Frogger*
Monsters	10.00	Acornsoft	The best version of *Space Panic*
Zalaga	7.00	Aardvark	The follow-up to *Arcadians*, offering great gameplay
Road Runner	8.00	Superior	Car chase maze game
Colossal Adventure	9.90	Level 9	First of a series of huge text adventures with 200 locations
Chuckie Egg	7.90	A&F	Compelling multi-level game with deadly ducks
Twin Kingdom Valley	9.50	Bug-Byte	Graphic adventure with over 170 locations
Killer Gorilla	7.95	Program Power	Excellent version of *Kong*
Ghouls	7.95	Program Power	Fast-moving multi-screen platform game
The Mine	7.95	Program Power	Excellent version of *Dig-Dug*; burrow down, collect treasure and avoid the monsters

ORIC GAMES

TITLE	PRICE	SUPPLIER	COMMENT
The Ultra	6.95	PSS	Multi-screen space game
Xenon	8.50	IJK	Exciting space shoot-'em-up
Zorgon's Revenge	8.50	IJK	Follow up to *Xenon* 1 with the flavour of the Spectrum classic *Manic Miner*
The Hobbit	14.95	Melbourne	Innovative graphics adventure based on Tolkein novel
Colossal Adventure	9.90	Level 9	First of a series of hugely complex text adventures
Mushroom Mania	5.50	Arcadia	Nice version of *Centipede*

LYNX GAMES

TITLE	PRICE	SUPPLIER	COMMENT
Colossal Adventure	9.90	Level 9	Just one of Level 9's excellent range of adventures
Gobble De Spook	9.90	Camsoft	Good version of *Pac-Man*
Backgammon	7.95	Camsoft	Wins often enough to convince you it cheats
Treasure Island	7.95	Camsoft	Simple but quirky adventure with nice graphics
Power Blaster	9.99	Romik	Simple graphics but sizzling action in this maze shoot-out

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out this list of PCG-approved titles

AT GAMES GALORE!

SPECTRUM GAMES

TITLE	MEM REQD	PRICE	SUPPLIER	COMMENT
Jet Pac	16K	5.50	Ultimate	Use your jet-powered man to assemble a rocket and avoid aliens
Lunar Jetman	48K	5.50	Ultimate	The follow-up to *Jet Pac*. Superb – if you can find out what to do
Pssst!	16K	5.50	Ultimate	Use insect sprays to protect your plant from nasty bugs
Manic Miner	48K	6.00	Software Projects	Spectrum classic, with 20 different screens to guide your miner through
Missile Defence	16K	5.95	Anirog	The best of six versions of Missile Command
Zzoom	48K	5.50	Imagine	3D view from a cockpit. Save refugees from attack by planes, tanks etc
Penetrator	48K	6.00	Melbourne House	The most sophisticated version of *Scramble* with 5-level action
Timegate	48K	7.00	Quicksilva	A superlative version of 3D *Star Trek* with a good measure of arcade action
Jumpin' Jack	16K	5.50	Imagine	One of the simplest games, yet incredibly addictive
Scrabble	48K	15.95	Sinclair	A brilliant simulation with an 11,000 word vocabulary
The Hobbit	48K	14.95	Melbourne House	A wondrous graphics adventure, which takes you through the Tolkien book
Valhalla	48K	14.95	Legend	An innovative attempt at an animated, multi-character adventure
Cyrus Chess	48K	9.95	Sinclair	Arguably the best chess game on the Spectrum
Apocalypse	48K	9.95	Red Shift	Complex strategy war game
Maziacs	48K	6.95	DK'tronics	Exciting maze game with nasty monsters
Colossal Adventure	48K	9.90	Level 9	First of a series of highly complex adventures with 200 locations
Android 2	48K	5.95	Vortex	Very difficult 3D version of *Robotron*
Scuba Dive	48K	5.50	Durell	Dive deep to get treasures. Terrific graphics
Fighter Pilot	48K	7.95	Digital Integration	Superb flight simulator with combat features
Ant Attack	48K	6.95	Quicksilva	Amazing 3D graphics as you try to save the girl from the killer ants
Cookie	16K	5.50	Ultimate	Great graphics and original kitchen theme
Halls of the Things	48K	7.50	Crystal	Very fast and difficult adventure/arcade game
Invasion of the Body Snatchas	48K	6.50	Crystal	Best version of *Defender* – but no sound without Fuller soundbox
Chuckie Egg	48K	7.90	A&F	Compelling multi-level game with deadly ducks
The Alchemist	48K	5.50	Imagine	Arcade adventure with excellent graphics
Pi-Balled	48K	6.00	Automata	Smooth version of the pyramid game *Q-Bert*
Deathchase	48K	6.95	Micromega	Exciting 3D motor-cycle chase with superb graphics
Code Name Mat	48K	6.95	Micromega	Demanding 3D space game with with many options
Night Gunner	48K	6.95	Digital Integration	Multi-level shoot-'em-up with excellent graphics
Caesar the Cat	48K	6.95	Mirrorsoft	Brilliantly animated cat-and-mouse game
Chequered Flag	48K	6.95	Psion	Superb motor-racing simulation

ZX81 GAMES

TITLE	PRICE	SUPPLIER	COMMENT
Forty Niner	5.95	Software Farm	Tunnelling game with superb high-res graphics
3D Defender	4.95	New Generation	Blast alien craft as they zoom towards you
Black Crystal	7.50	Carnell	Multi-part graphic adventure
3D Monster Maze	4.95	New Generation	Fight your way through the maze while avoiding T-Rex
Cassette 4	6.00	Orwin Software	8 games including excellent *Scramble* and *Defender*

DRAGON GAMES

TITLE	PRICE	SUPPLIER	COMMENT
Wizard War	6.50	Salamander	Two player game of battling wizards
Franklin's Tomb	7.50	Salamander	An eventful text adventure
The King	8.00	Microdeal	Good version of *Donkey Kong*
Frogger	8.00	Microdeal	Nice version of the arcade classic
Crusader	6.95	J. B. Morrison Micros	Rescue the damsel in distress
Empire	6.95	Shards	Computer version of the board game *Risk*
Cuthbert in the Jungle	8.00	Microdeal	Fight your way through the perilous jungle and collect treasure
Danger Ranger	8.00	Microdeal	Arcade adventure with *Kong*-style elements
Bloc-Head	7.95	Dragon Data	*Q-Bert* clone on rectangular pile of blocks
Colossal Adventure	9.90	Level 9	First of a series of hugely complex text adventures
Chuckie Egg	7.90	A&F	Addictive multi-level game with deadly ducks
Kriegspiel	6.95	Beyond	Excellent war-game with scrolling map

VIC 20 GAMES

TITLE	MEM REQD	PRICE	SUPPLIER	COMMENT
Lazerone	8K	6.50	Llamasoft	Alien invader game with guns on x, y axes
Matrix	8K	6.50	Llamasoft	High-speed grid game, *Centipede* derivative with unique features
Omega Race	Std	10.00	Vicsoft	*Asteroids* development featuring bouncing force-fields
Gorf	Std	10.00	Vicsoft	Four-screen arcade game with elements of many popular games
Spiders of Mars	Std	20.00	Audiogenic	*Defender* derivative with insect aliens
Satellites and Meteors	Std	20.00	Audiogenic	The definitive version of *Asteroids*
Choplifter	Std	25.00	Audiogenic	Exciting helicopter game, rescuing hostages
Serpentine	Std	25.00	Audiogenic	Variation of the *Pac-Man* theme, with gobbling serpents
Outworld	Std	25.00	Audiogenic	'State of the art' graphics for this *Missile Command* derivative
Space Fortress	Std	6.00	Romik	One of the best 3.5K shoot-'em-ups with multi-screen *Invader* type action
Gridrunner	Std	5.00	Llamasoft	Predecessor of *Matrix*; fast and furious grid game
Jet Pack	8K	5.50	Ultimate	Use your jet-powered man to assemble a rocket and avoid aliens
Myriad	6K	6.00	Vicsoft	Colourful, action packed shoot-up with 99 levels
Quadrant	Std	6.99	Romik	Athletic variant on *Galaxians*, with man jumping and shooting
Star Defence	16K	7.95	Anirog	Excellent version of *Defender*
Chariot Race	Std	6.95	Micro-Antics	Thrilling race-game set in ancient Rome
Bongo	16K	7.95	Anirog	Multi-level game with ladders and girders

ATARI GAMES

TITLE	PRICE	SUPPLIER	COMMENT
Star Raiders	30.00	Atari	A 3D arcade-quality space game
Defender	30.00	Atari	The licensed version from Williams of the arcade classic
Caverns of War	30.00	Atari	A vertical version of *Scramble*
Missile Command	30.00	Atari	This is the best and meanest version of the original
Zaxxon	28.00	Atari	Space-fighter multi-stage game with asteroids and space fortresses
Donkey Kong	30.00	Datasoft	An arcade copy, superbly done
Qix	30.00	Atari	An intriguing territorial possession game with clear graphics
Preppie	22.00	Adventure	Multi-screen arcade adventure featuring a lawn mower and vicious opponents
Choplifter	30.00	Broderbund	Exciting helicopter game, rescuing hostages
Miner 2049'er	30.00	Big Five	A *Donkey Kong* derivative with novel elements
Shamus	30.00	Synapse	Multi-screen arcade adventure game
Necromancer	30.00	Synapse	Wizard battles through several levels of mystic monsters
Pole Position	30.00	Atari	Superb version of the arcade motor-racing game
Tennis	25.00	Atari	Terrific simulation. Better than Wimbledon
Airstrike 2	9.95	English	Terrific version of *Scramble*

COMMODORE 64 GAMES

TITLE	PRICE	SUPPLIER	COMMENT
Super Pipeline	6.90	Taskset	Lay a pipeline while fighting off deadly bugs
Jammin'	6.90	Taskset	Strange and exciting game capturing musical instruments
Revenge of the Mutant Camels	8.00	Llamasoft	Follow-up to *Attack*, with camels fighting back and 42 screens
Motor Mania	8.00	Audiogenic	A good road race game
Falcon Patrol	8.00	Virgin	An excellent fighter simulation with a scrolling 3D landscape
Hovver Bovver	8.00	Llamasoft	Suburban gardeners run riot with their mowers in a fast and witty game
International Soccer	9.95	Commodore	Superb soccer simulation on cartridge
Twin Kingdom Valley	9.50	Bug-Byte	Superb animated graphics adventure
The Hobbit	14.95	Melbourne House	Graphics adventure based on Tolkien's book
Forbidden Forest	8.95	Audiogenic/Centresoft	Fight your way through a chilling monster-infested forest
Aztec Challenge	8.95	Augiogenic/Centresoft	Dodge spears, boulders and other hazards in a perilous fight for survival
Megahawk	6.95	Big G	Spectacular 3D space action based on *Buck Rogers* from the arcades
China Miner	7.00	Interceptor	A frenetic multi-level, multi-screen game with great sound and graphics
Jumpin' Jack	8.95	Livewire	Definitive 3D version of *Frogger*
Caesar the Cat	8.95	Mirrorsoft	Brilliantly animated cat-and-mouse game
Savage Pond	8.95	Starcade	Survive aggressive pond-life in your growth from tadpole to frog
Chinese Juggler	6.90	Ocean	Exciting game with great graphics in which you have to keep eight plates spinning
Bumping Buggies	6.99	Bubble Bus	Frantic road-race with strange obstacles

WHERE TO GET YOUR GAMES

Aardvark, 100 Ardleigh Green Road, Hornchurch, Essex
A & F Software, 830 Hyde Road, Manchester M18 7JD
Acornsoft, 18 Tower Street, Covent Garden, London WC2H 9NN
Anirog, 29 West Hill, Dartford, Kent
Artic Ltd, Main Street, Brandesburton, Driffield YO25 8RG
Audiogenic, PO Box 88, Reading
Automata UK Ltd, 27 Highland Road, Portsmouth, Hants PO4 9DA
Beyond, Durrant House, 8 Herbal Hill, London EC1
Big G, Birchall Moss Hall, Hatherton, Nantwich, Cheshire CU5 7PJ
Bug-Byte, Mulberry House, Canning Place, Liverpool L1 8JB
Camsoft, Camputers Ltd, 33 Awbridge Street, Cambridge CB2 1UW
DK'tronics, Unit 2, Shire Hill Industrial Estate, Saffron Waldon, Essex CB11 3AX
English Software Co, Box 43, Manchester M60
IJK Software Ltd, 9 King Street, Blackpool, Lancashire
Imagine, Masons Buildings, Exchange Street East, Liverpool L2 3PN
J B Morrison Micros, 2 Glensdale Street, Leeds LS9 9JJ
Level 9 Computing, 229 Hughenden Road, High Wycombe, Bucks HP13 5P
Legend, 1 Milton, Cambridge CB4 1UY
Llamasoft, Awesome Games Software, 49 Mount Pleasant, Tadley, Hants
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PSS, 452 Stoney Stanton Road, Coventry CV6 5DG
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Romik, 272 Argyll Avenue, Slough SL1 4HE.
Salamander, 17 Norfolk Road, Brighton, East Sussex BN1 3AA
Shards, 189 Eton Road, Ilford, Essex 1GU 2UQ
Softek, 12/13 Henrietta Street, Covent Garden, London WC2E 8LH
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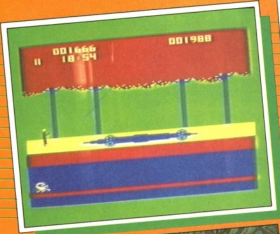
Have a swinging time on Cuthbert's crazy safari

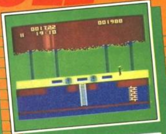
CUTHBERT IN THE JUNGLE

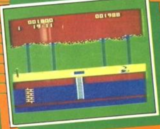
Cuthbert's had a pretty tough old life. First he had to go Walkabout, filling in lots of squares on the screen. Then he went off digging, pursued by the Moronian monsters. He'd scarcely had time to get his breath back before he was off again, this time to a steamy jungle infested with ferocious wildlife.

Cuthbert in the Jungle sees our hero engaged in a search for treasure which can only be found after successfully negotiating a series of terrifying hazards. Cuthbert, dressed top-to-toe in his maroon jungle-jogging suit, begins his perilous quest against the exotic background of blue trees and green screen (after all, this is a Dragon jungle). You press the fire-button and, suddenly, enormous boulders are rolling towards Cuthbert.

No problem – Cuthbert's a mean jumper. Anyway, these rocks won't kill him but only knock points off the 2,000 he started with. There are also holes in the ground which Cuthbert tends to fall through if he mistimes his leap. Again, you don't lose one of your three lives: you just waste time climbing back up the ladder. But if he stays in the depths he will encounter the large scorpion which lives there.



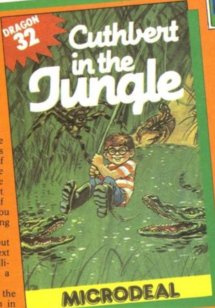




The first major obstacle Cuthbert comes up against is the pond, a wide expanse of shimmering blue water. The only way across is to catch the vine swinging above and get carried over Tarzan-style. If you miss it or fall off then you drop through to the stinging subterranean scorpion.

The vine is pretty tricky, but not nearly so difficult as the next pond, where three snapping alligators are waiting to make a meal of Cuthbert.

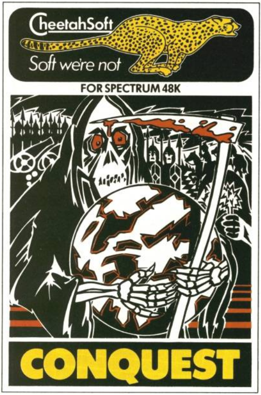
Their red heads pop out of the water and white teeth gleam in their gaping jaws. Cuthbert can only cross when the 'gators' gobs are shut. This requires a fine sense of timing; often Cuthbert ends up in the gullet of the last reptile.



Beat the alligators and it's on to the strange appearing/disappearing pond: one minute it's there, the next it's gone. And so is Cuthbert. Lurking evilly on the far side of the water is a writhing, venom-spitting snake. There's no known antidote.

A hot blue flame is the final obstacle before Cuthbert can start collecting treasure and accumulating points before the 20-minute time limit expires.

From now on the same dangers reappear, but in strange permutations. What makes *Cuthbert in the Jungle* such fun is the variety of hazards the player is faced with and the skill needed to get through them. The frustration you suffer makes success all the more pleasurable. When you add to this the excellent animation of Cuthbert himself and the good sound effects, you realise that this is one of the most enjoyable Dragon games around. PC



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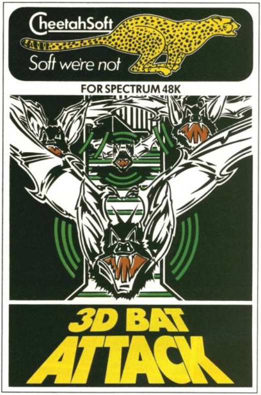

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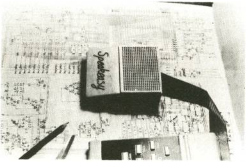

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astronomy
discover the heavens on your computer
maurice gavin

ZX Spectrum Astronomy by Maurice Gavin (Sunshine Books) £6.95

As is the case, I suspect, with many people, I have long been fascinated by astronomy – but I've been too lazy to do more than simply marvel at the Voyager pictures of Saturn and occasionally turn on the TV to watch The Sky At Night.

I would never claim to be an expert on the subject, but there has always been something about it that has aroused my curiosity. With Maurice Gavin's excellent book – subtitled 'Discover the heavens on your computer' – my knowledge has increased considerably.

The jacket blurb maintains that 'astronomy and your Spectrum are just made for each other. The graphics potential of the Spectrum means that the subject can be brought to life...'

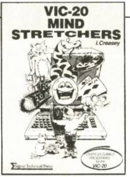
This book is not specifically directed at astronomers but at Spectrum owners who wish to expand their computing interests into other fields. It may offer one answer to that perennial question directed at home computer owners: 'yes, it's very nice but what does it actually *do?*'

The book allows accurate representations of the features of the night sky on any given date and at any given location to be made, helps the budding astronomer to work out planetary orbits, predict the paths of comets, use the Spectrum's user-defined graphics to display the phase of the moon for any given date – and much, much more.

For example, did you know that astronomers use their own calendar of Julian Days, which starts at noon GMT on 1 January 4713 BC? The current Julian Day is a seven-figure number in excess of 2,400,000.

It should be stressed that non-astronomers should find much to interest them here, as some of the routines can easily be adapted for other uses. The listings are dumped direct to an Epson printer via an RS232 interface, so there should be no problems with wrong or illegible program lines.

ZX Spectrum Astronomy is well-produced, easy to read, and fascinating. Sunshine Press and Maurice Gavin should be congratulated for producing a book that goes far beyond the usual computer literature and which could well serve as an introduction to an absorbing hobby. **TH**



Vic 20 Mind Stretchers by I. Creasey (Sigma Technical Press) £5.95

Dynamic Games For Your Vic 20 by Matthew Boek £5.95

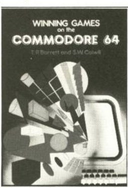
A brace of books for the Vic 20 this month. Both appear from the outside to be very similar, with just under 110 pages containing just over 30 programs in each, and both costing £5.95. The programs in both books are a good selection of the old favourites like *Lunar Lander* and *Muncher*, together with a selection of new ideas and a few utility programs.

But even a quick flick through the pages of both of these books reveals some startling differences between them. **'Dynamic Games'** by Matthew Boek contains very clear, easy to read listings that have been produced on Commodore's new four-colour plotter, whereas **'Mind Stretchers'** uses the more usual dot-matrix listings. What a treat, I thought as I eagerly turned on my Vic, made a quick cup of coffee and prepared for a late night at the keyboard. Easy to read listings at last.

However, my problems started with the first program from 'Dynamic Games' that I tried (*A Day At The Races*). The listing contained unrecognisable characters and characters with lines under them, and I was unable to type it in! A thorough reading of the book revealed a list of some of these characters in the Appendix, but by no means all of them, and for this reason alone I cannot recommend this book to anyone other than a masochist who enjoys typing and debugging rather than playing the games.

So, on to Mr Creasey's **Vic 20 Mind Stretchers**. While the listings don't look as good as in the first book they are at least perfectly readable and contain familiar characters. Also, each program has a line-by-line description and a list of the variables used, which is very handy if you want to find out *how* a program works.

Typing in a few programs at random reveals another facet of this book, which is now beginning to grow on me. Several of the programs contain machine code routines to make the game much faster and more fun to play. It's difficult to tell whether the games are better than the first book but they are certainly well worth the 20 pence per game that makes up the asking price. **DP**



Winning Games on the Commodore 64 by T.P. Barrett and S.W. Colwill (Ellis Horwood Ltd) £5.95

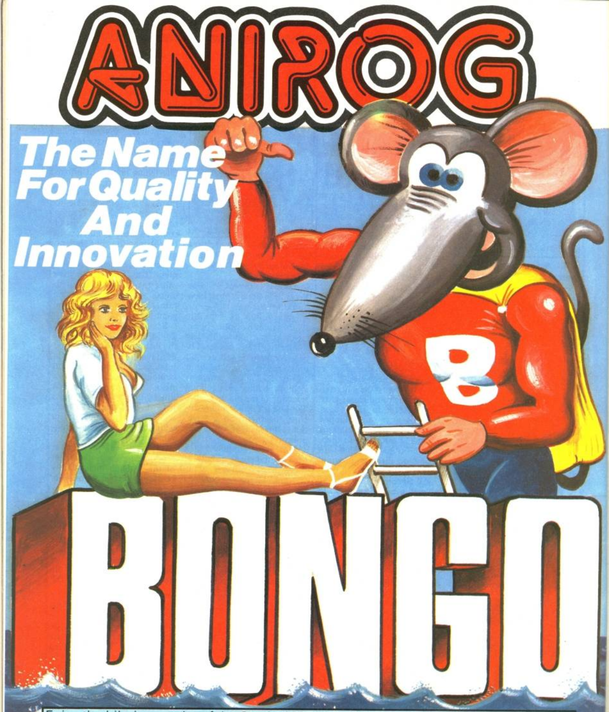
This is a substantial addition to any Commodore 64 user's program listings.

The format follows the traditional approach for listings books. No one these days risks typesetting program listings, in case printers' errors slip by. The only portions of this work not churned out in the ghastly spotted print associated with dot-matrix printers are non-program material, such as the light-hearted introductions to each of the listings.

What separates this book from the usual run of the mill listings works is that it has nine excellent chapters setting out the rudiments needed by any beginner before they can start to write Basic programs on the 64. The book is very much a teaching guide to programming, with the very substantial games listings providing the incentive to master the basic skills. Its whole thrust is aimed at educational establishments, but this does not mean that it needs the presence of a teacher to be used. It is solidly in the line of self-tutoring texts and there should be no difficulty getting down to it on your own at home.

The 64 is not the easiest machine in the world to use, because both the sound and graphics facilities – though powerful – can only be used to the full by endless POKING and PEEKING. Using Peeks and Pokes when you don't know what you are doing is a bit like blundering about in a darkened room trying to catch a black cat. This book manages to clarify the concepts in under two pages.

Better, it goes into great detail in the first nine chapters on breaking down lengthy games listings to tell you exactly what is going on at each stage of the program. If you finish the book without learning how to construct your own sprites and write your own animated games you'll know that programming is not your forte. **TH**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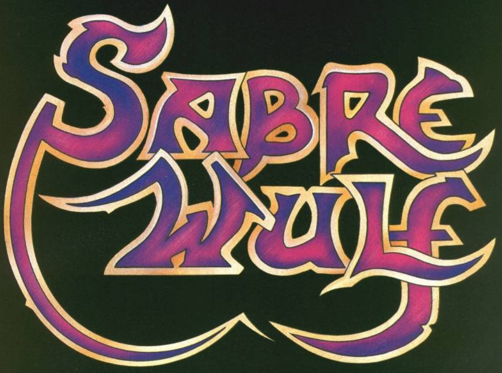

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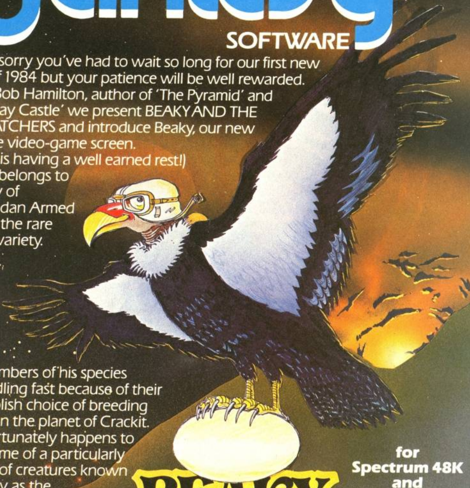

The numbers of his species are dwindling fast because of their rather foolish choice of breeding ground, on the planet of Crackit. This unfortunately happens to be the home of a particularly evil band of creatures known collectively as the Eggsnatchers. Their sole malicious intent in life is to extinctify Beaky's species by stealing or destroying the eggs by any foul means available.

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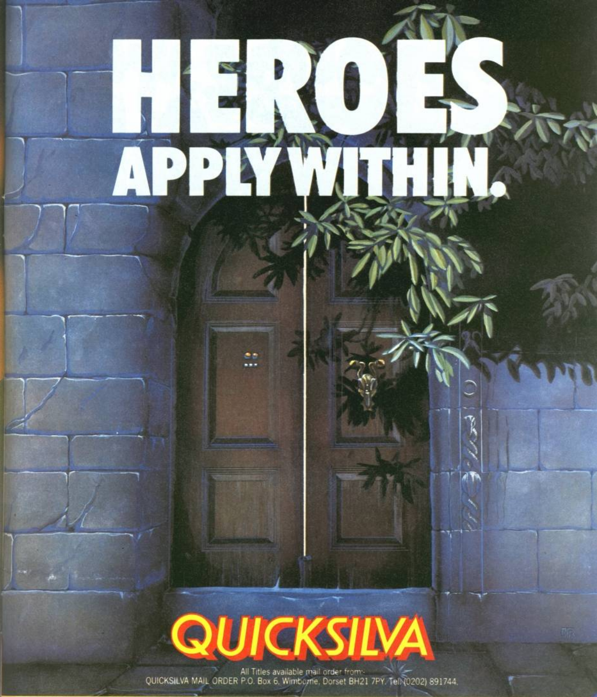
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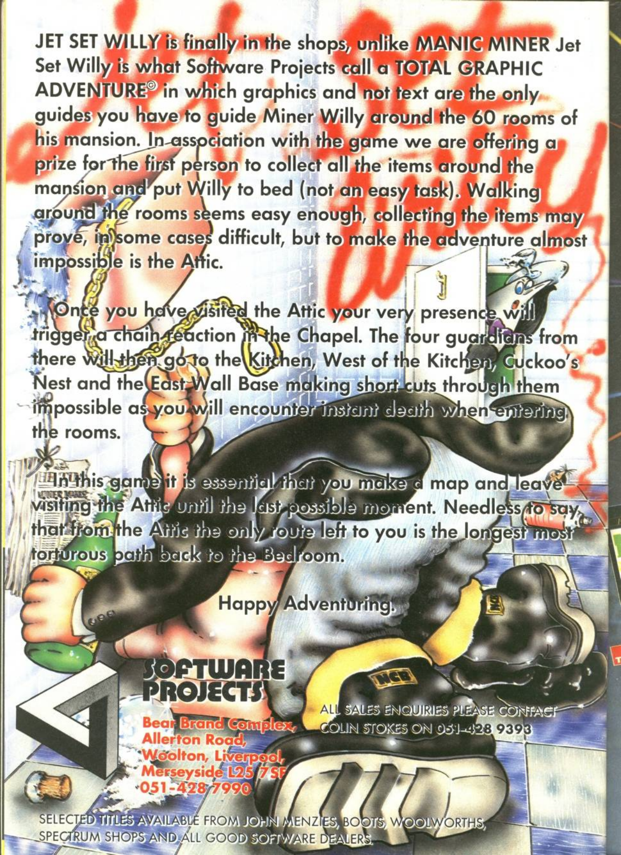

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Once you have visited the Attic your very presence will trigger a chain reaction in the Chapel. The four guardians from there will then go to the Kitchen, West of the Kitchen, Cuckoo's Nest and the East Wall Base making short cuts through them impossible as you will encounter instant death when entering the rooms.

In this game it is essential that you make a map and leave visiting the Attic until the last possible moment. Needless to say, that from the Attic the only route left to you is the longest most torturous path back to the Bedroom.

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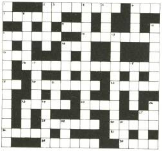
COMPUTER CROSSWORD



Across

2. The last place to communicate with your computer (8)
6. Fasten to notice-board (3)
7. It's a part of an inferior class (6)
9. Basically, it's a comment your computer should ignore (3)
11. Sounds like a levy on immoral earnings – a common error (6)
12. Moved graphically (8)
14. Mythical monster leads orchestra (3)
16. Annual inflation (6,8)
19. Is it off? No, that's backwards (2)
20. Small branch to an optional Basic command gives you a savoury snack (7)
22. Centre of attention (5)
23. Micro amnesia (5)
25. I enter 14 across to obtain a micro (4)
27. This PCG reviewer has a small current account! (2)
28. Best number prepared
30. Remop untidily a reprogrammable chip (5)
32. Micro dot (5)
33. Therefore reverse the operating system (2)
34. Increase memory (6)
35. Look into memory (4)

Down

1. In brief, the way to control a micro (2)
2. State of the Union instruments? (5)
3. Out of this world (2)
4. Faster programs (2,7,4)
5. Against (4)
6. Alcoholic access point (4)
8. Trashcan plus twisted ray – it's all 0s and 1s (6)
10. Byte's location (7)
11. Sandy slice of potato inside your micro (7,4)
13. They're used for photographic information retrieval – but maybe they should be served up with 11 down (11)
14. How to float down a river in an adventure game? (2,3)
17. Go inside to execute a command (5)
18. CIA is in a muddle over this international computer code (5)
21. It is short (3)
23. Persuade (4)
24. The computer taken by Eve (5)
26. Memory you can POKE (3)
27. Centre of 24 (4)
29. Mischievous sprite (3)
31. American father (3)

SOFTWARE SEARCH

Hidden in this grid of letters are the names of 15 popular computer games. They may read left, right, up, down or diagonally. (Puzzle submitted by Colin McMahon, Kirkcaldy, Fife).

A	J	E	T	P	A	C	B	E	C	F	P	D	G	E
H	K	S	I	S	P	O	J	N	L	A	M	Q	V	R
S	U	V	W	K	C	X	C	Y	C	B	Z	I	A	D
F	E	K	G	R	G	I	H	M	L	M	D	D	L	N
K	Y	A	X	A	B	W	A	B	Z	A	D	R	H	E
C	K	P	I	M	A	N	I	A	B	W	R	E	A	J
A	I	E	G	B	Q	R	Y	U	U	R	C	N	L	G
B	J	N	P	L	T	Z	C	A	D	E	E	I	L	G
H	B	E	H	E	S	S	A	S	R	D	P	M	A	I
C	E	T	F	Z	Z	O	O	M	G	N	I	C	J	K
N	H	R	B	U	T	S	R	Q	P	E	N	I	M	K
U	J	A	X	R	E	G	G	O	R	F	W	N	Q	K
H	E	T	W	F	I	A	R	T	S	E	U	A	M	O
D	E	O	J	W	F	I	A	R	T	D	A	M	B	N
P	O	R	Q	E	I	K	O	O	C	T	P	M	T	G

PROGRAM PUZZLE

What does the program do and where should the GOTO on line 30 go to?

```
10 FOR I = 1 TO 100
20 FOR T = 2 TO I – 1
30 IF I/T = INT(I/T) THEN GOTO?
40 NEXT T
50 PRINT I
60 NEXT I
```

ANSWERS AT THE BOTTOM OF THE PAGE

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PROGRAM PUZZLE

Prints prime numbers between 1 and 100; Line 60.

SOFTWARE SEARCH

Jet Pac, Pi-Mania, Skramble, Cookie, Gorf, Penetrator, Kong, Pac-Man, Scuba Dive, Defender, Hunchback, Manic Miner, Zzoom, Frogger, Valhalla

COMPUTER CROSSWORD

Across

2. Terminal. 6. Pin. 7. Subset. 9. Rem. 11. Syntax. 12. Animated. 14. Orc. 15. Lur. 16. Yearly increase. 19. On. 20. Twiglet. 22. Focus. 23. Crash. 25. Oric. 27. CA. 28. Primed. 30. Eprom. 32. Pixel. 33. So. 34. Expand. 35. Peek.

Down

1. OS. 2. Texas. 3. ET. 4. In machine code. 5. Anti. 6. Port. 8. Binary. 10. Address. 11. Silicon chips. 13. Microfiches. 14. On log. 17. Enter. 18. ASCII. 21. ITS. 23. Coax. 24. Apple. 26. Ram. 27. Core. 29. Imp. 31. Pop.

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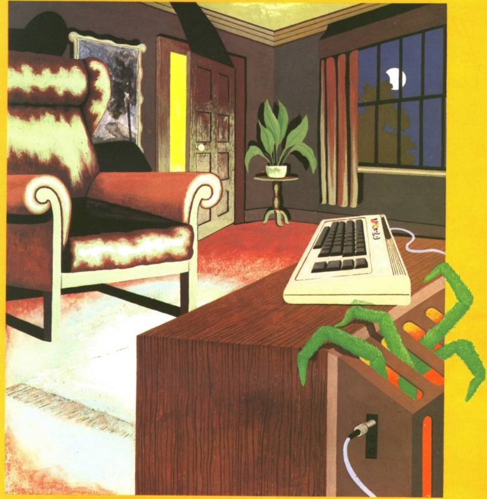

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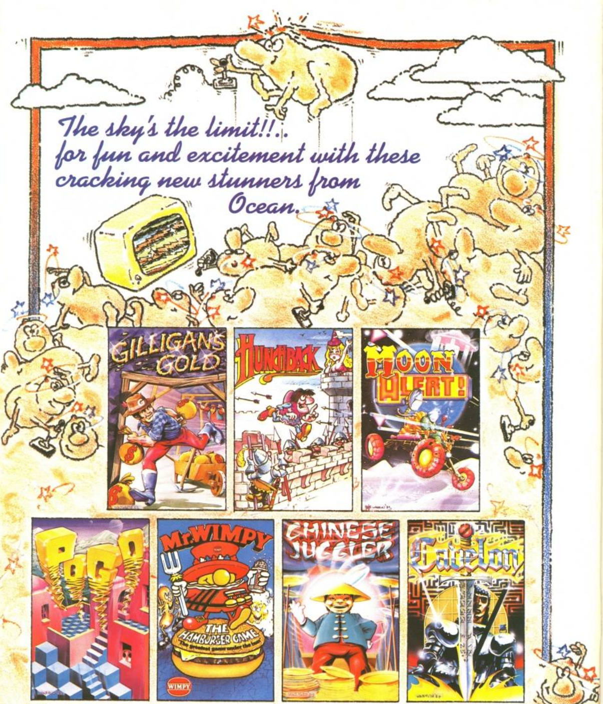
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